

<110> Shi et al.

<120> 18 human secreted proteins

<130> PF512P1

<140> Unassigned

<141> 2001-01-25

<150> PCT/US00/22350

<151> 2000-08-15

<150> 60/148,759

<151> 1999-08-16

<160> 61

<170> PatentIn Ver. 2.0

<210> 1

<211> 733

<212> DNA

<213> Homo sapiens

<400> 1

gggatccgga	gcccaaatact	tctgacaaaa	ctcacacatg	cccaccgtgc	ccagcacctg	60
aattcgaggg	tgcaccgtca	gtcttcctct	tccccccaaa	acccaaggac	accctcatga	120
tctcccgac	tcctgaggtc	acatgcgtgg	tggtggacgt	aagccacgaa	gaccctgagg	180
tcaagtcaa	ctggtaacgtg	gacggcgtgg	aggtgcataaa	tgccaagaca	aagccgcggg	240
aggagcgtga	caacagcactg	taccgtgtgg	tcagcgtcct	caccgtcctg	caccaggact	300
ggctgaatgg	caaggagttac	aagtgcagg	tctccaacaa	agccctccca	accccccattcg	360
agaaaaaccat	ctccaaagcc	aaagggcagc	cccgagaacc	acaggtgtac	accctgcccc	420
catcccgaaa	tgagctgacc	aagaaccagg	tcagcgtgac	ctgcctggtc	aaaggcttct	480
atccaagcga	catgcgcgtg	gagtgggaga	gcaatggca	gccggagaac	aactacaaga	540
ccacgcctcc	cgtgctggac	tccgacggct	ccttcttcct	ctacagcaag	ctcaccgtgg	600
acaagagcag	gtggcagcag	gggaacgtct	tctcatgctc	cgtatgcat	gaggctctgc	660
acaaccacta	cacgcagaag	agcctctccc	tgtctccggg	taaatgagtg	cgacggccgc	720
gactctagag	gat					733

<210> 2

<211> 5

<212> PRT

<213> Homo sapiens

<220>

<221> Site

<222> (3)

<223> Xaa equals any of the twenty naturally occurring L-amino acids

<400> 2

Trp Ser Xaa Trp Ser

1

5

<210> 3

<211> 86

0 6 7 6 3 3 2 6 - 0 4 2 6 0 3

<212> DNA  
<213> Artificial Sequence  
<220>  
<221> Primer\_Bind  
<223> Synthetic sequence with 4 tandem copies of the GAS binding site found in the IRF1 promoter (Rothman et al., Immunity 1:457-468 (1994)), 18 nucleotides complementary to the SV40 early promoter, and a Xho I restriction site.

<400> 3  
gcccctcgag atttccccga aatcttagatt tcccccggaaat gatttccccg aaatgatttc 60  
cccgaaatat ctgccatctc aattag 86

<210> 4  
<211> 27  
<212> DNA  
<213> Artificial Sequence  
<220>  
<221> Primer\_Bind  
<223> Synthetic sequence complementary to the SV40 promoter; includes a Hind III restriction site.

<400> 4  
gcggcaagct ttttgcaaag cctaggc 27

<210> 5  
<211> 271  
<212> DNA  
<213> Artificial Sequence  
<220>  
<221> Protein\_Bind  
<223> Synthetic promoter for use in biological assays; includes GAS binding sites found in the IRF1 promoter (Rothman et al., Immunity 1:457-468 (1994)).

<400> 5  
ctcgagatt ccccgaaatc tagatttccc cgaaatgatt tcccccggaaat gatttccccg 60  
aaatatctgc catctcaatt agtcagcaac catagtcccg cccctaactc cgcccateccc 120  
gcccttaact ccgcccagtt ccgcccattc tccggcccat ggctgactaa ttttttttat 180  
ttatgcagag gccgaggccg cctcggccctc tgagcttattc cagaagttagt gaggaggctt 240  
ttttggaggc ctaggctttt gaaaaagct t 271

<210> 6  
<211> 32  
<212> DNA  
<213> Artificial Sequence  
<220>  
<221> Primer\_Bind  
<223> Synthetic primer complementary to human genomic EGR-1 promoter sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a Xho I restriction site.

<400> 6  
gcgctcgagg gatgacagcg atagaacccc gg 32

<210> 7  
<211> 31  
<212> DNA  
<213> Artificial Sequence  
<220>  
<221> Primer\_Bind  
<223> Synthetic primer complementary to human genomic EGR-1 promoter sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a Hind III restriction site.

<400> 7  
gcgaagcttc gcgactcccc gatatccgcct c 31

<210> 8  
<211> 12  
<212> DNA  
<213> Homo sapiens

<400> 8  
ggggactttc cc 12

<210> 9  
<211> 73  
<212> DNA  
<213> Artificial Sequence  
<220>  
<221> Primer\_Bind  
<223> Synthetic primer with 4 tandem copies of the NF-KB binding site (GGGGACTTTCCC), 18 nucleotides complementary to the 5' end of the SV40 early promoter sequence, and a XhoI restriction site.

<400> 9  
gcggcctcgaa ggggactttc ccggggactt tccggggact ttccgggact ttccatcctg 60  
ccatctcaat tag 73

<210> 10  
<211> 256  
<212> DNA  
<213> Artificial Sequence  
<220>  
<221> Protein\_Bind  
<223> Synthetic promoter for use in biological assays; includes NF-KB binding sites.

<400> 10  
ctcgaggggaa ctttccggg gactttccgg ggactttccg ggactttcca tctgccccatct 60  
caattagtca gcaaccatag tcccgccccct aactccgccc atcccgcccc taactccgccc 120  
cagttccgccc cattctccgc cccatggctg actaattttt tttatattatg cagaggccgaa 180  
ggccgcctcg gcctctgagc tattccagaa gtatgtggaa ggcttttttg gagggcctagg 240  
cttttgcaaa aagttt 256

<210> 11  
<211> 2247  
<212> DNA

<213> Homo sapiens

<400> 11

cagggacaca	gcagcgtccg	gcgagatgaa	ggcgcttggg	gctgtcctgc	ttgcccttctt	60
gctgtcggg	cggccaggga	gagggcagac	acagcaggag	gaagaggaag	aggacgagga	120
ccacgggcca	gatgactacg	acgaggaaga	tgaggatgag	gtgaaagagg	aggagaccaa	180
caggctccc	ggtggcagga	gcagagtgc	gctgcgtgc	tacacctgca	agtcccgtcc	240
cagggacgag	cgctgcaacc	tgacgcagaa	ctgctcacat	ggccagaccc	gcacaaccct	300
cattgcccac	gggaacacccg	agtcaggcct	cctgaccacc	cactccacgt	ggtgcacaga	360
cagctgccag	ccccatcacca	agacggtgaa	ggggaccagg	gtgaccatga	cctgctgcca	420
gtcagggct	tgcaatgtcc	cacccctggca	aagctccga	gtccaggacc	caacaggcaa	480
gggggcaggg	ggggcccccgg	gcagctccga	aactgtgggc	gcagccctcc	tgctcaacct	540
ccttgcggc	cttggagcaa	tggggccag	gagaccctga	cccacggccc	ctccccaccc	600
ccacccggct	caccccccggc	cctgcccagca	ctctgtctgg	taccttcccc	tcctgcccct	660
gcacccagct	tggagaatgg	atttggagtg	tcttggcga	tcacggccagc	gcagggccccc	720
ggcccggtt	cttccctcagt	tcccgctgt	gtccttgggt	tcctttctcc	accacccgtg	780
agcagcaaga	ctgcccgcacg	tgggcgtgg	gtccagaccc	cgctgcccac	gtcccaggac	840
ctgcagccct	cacgggggct	ggggatcccc	atcagcacag	ccaggcagag	atgataacca	900
ccacacaccc	ggggggccccc	acacccagtc	ctcaccctta	acttctgcca	tgggaatttc	960
tccatctgca	gcagtcacac	ggggccaccc	tgccttccc	caggtcggcc	tctccgctgt	1020
ctggagggaa	ggggattttgg	aggaggctg	tcgtcgcccc	caggaaagac	gggcctgggg	1080
gaggcgggac	agtgggagag	gcmcgttag	gatgagaggg	cacaggagg	tgggttgggg	1140
tgaggccaca	tgcggggggg	cggggcgggg	cggggctggg	gggacaggca	ccaagtatga	1200
agaggatggg	gccagggggg	cctgtctggc	tgtggcgtga	gcaccgctat	gggagaccct	1260
ggcttggaaa	gtgaacttgc	agccttggat	ggggaaaggc	cagatgtctgg	gtgggtgcct	1320
gtcaccttga	ggtgaccatc	tagggtcagt	acctgtctgg	cttaggacag	cgcctgaggc	1380
tgggaatacc	tgtctctgt	ctagcagagg	ctaaagcagg	ctagagcagt	ggaggggtgg	1440
agttgatgaa	aggagaggag	tagatgagat	ggaatttttc	cagcctcattc	ctggcctgccc	1500
ctctagactc	cagtcccaa	gcctcagcc	tagtgggtgt	catggatgga	tctgggggtg	1560
tcagacaggc	taccctgtgc	cagggggggg	gcagaatggg	cctgcagctt	cctgcagagg	1620
aagcaggact	gggttagcaga	gcgggaaagg	tgggtggccc	attacagggg	gtccccagg	1680
gtgtcctctg	gcagggtctgt	gactgtcgca	agctctgcct	tcaccagtag	ctgggtccag	1740
gacagagctc	tgggacagca	ggcagaggcc	gagcctgggc	cacagctca	ccactgactt	1800
gggtatcgt	ttcccccttct	gagaagtaca	gagtgagact	taaagaaccc	ctagatcccc	1860
accagttcaa	caactccatta	actgggaaagc	ccagagtcct	gtccggcctg	ccaagttcat	1920
cctgggtggac	agcgggaggc	ctccgctaac	tgttctcttc	ttttccttat	taataaaaaca	1980
cacaatgcct	agctgggggg	tccgaaggca	aatgccttag	atgggtgggg	cacgtctttc	2040
tccttctctt	tcctcccttct	gtggctgaa	gtgatgactg	gagctcagca	accactttgc	2100
accatgaggc	agcaactgagc	acggtagggc	agcctggtga	gagggggcta	gctcgtgccc	2160
gacagaagtc	actgcctacc	tcagggtccc	tttacctggg	tggaaataaa	atttctgctg	2220
tgttggaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	2247

<210> 12

<211> 2644

<212> DNA

<213> Homo sapiens

<400> 12

ccgggtcgac	ccacgcgtcc	gacctggcct	gctggagcgc	atggtggagg	cgctccgcgc	60
aggaagcgca	cgtctgggt	ccggcccccgg	tgccacggcc	aaccctgcca	ggtgcctggc	120
cctgaacgtc	agcctgcgc	agtggaccgc	ccgctatggc	gcagcccccg	ccgcgcggcc	180
ctgcgcacgc	ctggacggag	atgctgtgg	gctccgtgc	gcccgcgcacc	tcttcaacct	240
ctcggcgccc	ctggcccccgg	cgtggggcac	cagcctcttt	ctgcagaccc	cccttcggcgg	300
ctggggcggt	cagctgtgg	acttgaccc	cgccgcggcg	cgccagccccc	cgctggccac	360
ggcccacgcg	cgctggaaagg	ctgagcgcga	gggacgcgcgt	gggggggggg	cgctgtcccg	420
cgcgctgggc	atccgcctag	tgagctggga	aggcggggcg	ctggagtggt	tccgtgc当地	480
caaggagacc	acgcgcgtct	tccggaccgt	ggtggcgcac	acgcccgcct	acctctacga	540

ggagcgcgtgg	acgccccccc	gctgcctgcg	cggcgtgcgc	gagaccgccc	gtatgtgg	600	
gggcgtgtctg	gaggctgcgg	gcgtgcgtca	ctggctcgag	ggcggctcac	tgctgggggc	660	
cggccgcac	ggggacatca	tcccattggga	ctacgacgtg	gacctgggca	tatacttgg	720	
ggacgtgggc	aactgcgagc	agctgcgggg	ggcagaggcc	ggctcggtgg	tggatqagcg	780	
cggcttcgtta	tgggagaagg	cggtcgaggg	cgacttttc	cgcgtgcagt	acagcgaaag	840	
caaccacttg	cacgtggacc	tgtggccctt	ctaccccccgc	aatggcgtca	tgaccaagga	900	
cacgtggctg	gaccaccggc	aggatgtgga	gttcccgag	cacttcctgc	agccgctgg	960	
gccccctgccc	tttgcggct	tcgtggcga	ggcgccta	aactaccgc	gcttcctgg	1020	
gctcaagttc	gggcccgggg	tcatcgagaa	ccccccagtc	cccaacccgg	cactgctgag	1080	
tctgacggga	agcggctgaa	gccctgataa	cctcgccctt	gtttttcggg	ggtctgtctg	1140	
gatgtggaga	agctctgtgt	gagcggtgag	gggtggaggg	atgtcgcgga	gaggggaagg	1200	
ggggaaactga	ccaagaaaaga	aattctaagg	agagcatgag	agaaggctgg	cattggcagg	1260	
aggagagcac	caggacgagg	atgggaagcg	acctccagat	ttatcaa	atgtcgcgga	1320	
ctgggagccg	tggatatg	ctgggacatc	ctgggtc	tcagtcatgg	agggagacgg	1380	
ggatgtcacg	cctccccc	gggcccagca	cagccccaga	cccgaaaaaa	gtgttctgc	1440	
caagattccg	agagccctgc	gctctagg	aggggcagag	ttttggaaac	agtgcaggg	1500	
ctggagccag	actggcgaga	ttcaaatc	ggctctatcg	cttcggagcc	aggtgggc	1560	
ggggggggcgt	cgcagtc	ctgtgcctca	gttgcttca	ggatgcggg	cccttggctg	1620	
cagggggttgc	ttccgc	caact agagggcg	ccgg	tcctgtggc	ccactgtgg	1680	
tgccccggcga	cagtacgccc	agggcctgt	ttccatagc	atctactc	ttgagc	1740	
ggacttctct	ccaagccc	gtgggaggcg	gacagcagt	accac	ttcttttgg	1800	
actgcgac	ccttcc	tggagagcc	ctgtgac	catgctact	ttaactgtt	1860	
tattcaagac	tgaatagaag	tatttc	atgtcag	ggaaatg	ctc agagctccg	1920	
ggtgcgcgtg	tgg	tcgagaa	ccgggt	ctg	ggccgggcgc	1980	
ccagcac	ttt	gggaggccg	gg	ttt	ggggctcac	gcctgt	2040
tcggcaacat	gcaagaccc	cgtct	ctt	ttt	aaatgtc	at	2100
tcgcagctcc	actcatgact	aatac	ttt	cag	tttgcac	tttcc	2160
ttgcacggca	gttagaca	taaccat	tcacact	tc	tttgcac	tttcc	2220
ggcaccattc	tcagtgtt	ac	cttgc	tttgc	tttgcac	tttcc	2280
agtgcac	agct	acta	atgc	ct	tttgcac	tttcc	2340
tcacttg	tc	acta	atgc	ct	tttgcac	tttcc	2400
tcaggc	tc	acta	atgc	ct	tttgcac	tttcc	2460
agagggc	tc	acta	atgc	ct	tttgcac	tttcc	2520
tgcac	tc	acta	atgc	ct	tttgcac	tttcc	2580
aatatataca	gata	actatt	tctgtat	ttt	tttgcac	tttcc	2640
aatt							2644

```
<210> 13  
<211> 1824  
<212> DNA  
<213> Homo sapiens
```

```

<400> 13
ctctgcatct gcctgcctcg ggcagaggag ggctaccctg gggctgagag ttcacctgtc      60
tcaggaacca cctgagccca cagatcctgt gggcagcgc cagggcagcc atggcttggg     120
caagttaggct gggctgctg ctggcaactgc tgctgcccgt ggtcgtgtcc tccacgcccag    180
gcaccgttgtt ccgactcaac aaggcagcat tgagctacgt gtctgaaatt gggaaagccc   240
ctctccagcg ggcctgcag gtcactgtcc ctcatttcct ggactggagt ggagaggcgc   300
ttcagcccac caggatccgg attctgaatg tccatgtgccc cgcctccac ctgaaattca   360
ttgctggttt cgagatgcgc ctgctggcag cagctaattt tacttcaag gtctttcgcg  420
ccccagagcc cctggagctg acgctgcctg tggaaactgct ggctgacacc cgcgtgaccc  480
agagctccat caggaccctt gtggtcagca tctctgcctg ctcttatttc tcgggccacg  540
ccaacgagtt tgatggcagt aacagcacct cccacgcgcgt gctggcctg gtgcagaagc  600
acattaaagc tgtcttgagt aacaagctgt gcctgagcat ctccaacctg gtgcagggtg  660
tcaatgtcca cctgggcacc ttaattggcc tcaacccctg gggtcctgag tcccagatcc  720
gctattccat ggtcagtgtg cccactgtca ccagtacta catttccctg gaagtcaatg  780
ctqttctctt cctgctgggc aagcccatca tcctgcccac ggatgccacc cttttgtgt  840

```

tgccaaggca	tgtgggtacc	gagggctcca	tggccaccgt	gggcctctcc	cagcagctgt	900
ttgactctgc	gctcctgctg	ctgcagaagg	ccgggtcccct	caacctggac	atcacaggc	960
agctgaggc	ggatgacaac	ctgtgaaca	cctctgtct	ggccggctc	atcccgagg	1020
tggcccgcca	gtttcccgag	cccatgcctg	tggtgc当地	ggtc当地	ggtc当地	1080
ctgtggccat	gctccacaca	aacaacgcca	ccctgc当地	gcagccctc	gtggagggtcc	1140
tggccacagc	ctccaaactcg	gctttccagt	ccctcttctc	cctggatgtg	gtatgtact	1200
tgaactcca	gctctctgtg	tccaaaggta	agttcaggg	gaccacgtct	gtgctggggg	1260
atgtccagct	cacggtgccc	tcctccaacg	tgggctcat	tgatacagat	caggtgc当地	1320
cactgatggg	caccgtttt	gagaagcccc	tgctggacca	tctcaatgtct	ctcttggcca	1380
tgggaattgc	cctccctgg	gtggtaacc	tccactatgt	gccctgaga	tctttgtcta	1440
tgagggctac	gtggtgat	ccagtggact	cttctaccag	agctgaggca	agaccactgg	1500
gaggcctgag	agtggccag	ctcgctgctc	aggcgaattt	ctcatttcaa	gccactgggg	1560
aaactgaggc	aaaaccatac	ttagtcatca	ccaacaagct	ggactgctta	gctggctgt	1620
tttatcttcc	ctgagtgcct	gggtctccc	ccctcaactc	tgc当地	cttc当地	1680
ctcttctcc	cccttctccc	tcatctccc	cctccttct	ctgccccacc	ccagggggga	1740
gcagactgct	cctccaggct	gtatagacct	gcccttgc	attaaacaac	ttcttgc当地	1800
ctgaaaaaaaaa	aaaaaaaaaa	aaaa				1824

BioXplore

```

<210> 14
<211> 1060
<212> DNA
<213> Homo sapiens

```

<400> 14	60					
ggcacgaggt	cacgtggcg	agtcgttagct	ttagacaagc	ggccagcctt	gacacgtgac	120
ccaagccccca	gcttcgc当地	ggatggagc	cggaagaggg	gacgc当地	tggc当地	180
agaagctgco	ggccgagctg	ggcccgccagc	ttcttccaaa	aataattgtat	ggcatttgc当地	240
gtcgagctta	tcctgtgtac	caagattatc	acactgtttg	ggaatc当地	aatggatgc	300
acgttttaga	agatattgc	aaattttca	aagccatag	tgtaaaaaac	ttacctgtat	360
aagagatatt	tcagcagttg	aatcagttg	attcacttca	tcaagaaaact	atcatgaaaat	420
gcgtaaaaag	taggaagat	gaaatcaaacc	aggctctgctc	aagagaaaata	gttgc当地	480
cctctgcaca	gctacaggat	tttgattggc	agttaaagct	tgc当地	agtgacaaga	540
ttgctgcatt	acgaatgcca	ctttaagcc	tgc当地	tgtaaaaagaa	aatggtgaag	600
taaaaacctt	ttcttatgaa	atgagtagag	aggagctgca	aatctaata	cagtc当地	660
aagcagcgaa	taagggtg	ctgc当地	aataactgga	aatgtat	accagtc当地	720
tcagatttta	ttgctccaa	ttatatggca	gagt当地	tgc当地	gaaaccttgc当地	780
gatgtcttga	ctgttgc当地	aggctgagaa	agcagcaata	ttgatattat	aaagataaaa	840
atttatcaac	attccttac	agaaaattac	atgggtgaga	gaaatgc当地	aaaatgaaag	900
atgaaaaatc	tatagtagca	gtttagtattt	tcatgattgt	ttgc当地	ttattaaata	960
tttgagaaat	ctttggagat	acatagttt	attgaaagct	aaaaataggt	tctaaagtaa	1020
tgaaaaata	taaagcaca	atatacttga	atattgc当地	agaatttgc当地	tgaatagcaa	1060
catatattat	ggatata	tttgtgat	ttttaaaaaa			

```

<210> 15
<211> 1860
<212> DNA
<213> Homo sapiens

```

<400> 15	60					
ccgggtcgac	ccacgcgtcc	gctcaaattt	gtgatattgc	atgc当地	tgacacagat	120
gaagccctca	gagtc当地	tctgctaca	gatgactttg	gtatcaaacc	cggaataatc	180
tttgctgaga	tgccatgtgg	cagacagcat	ttacagaatt	tagatgtgc	tgtaatggg	240
tctgc当地	caatcttatt	actgactgaa	aacttttaa	gagatacttg	gtgtaatttc	300
cagttctata	cgtccctaa	gaaactccgtt	aacaggc当地	ataaataaca	ctctgttata	360
cccatgc当地	ccctgaacaa	tccccttccc	cgagaaagga	ctcccttgc	cctccaaacc	420
atcaatgc当地	tagagaaaga	aa	gatgtg	tttc当地	aagttagaaag	

gagtcgttgt	ataagacaca	acaaaactata	tggaaagaga	caagaaaat	ggtacaaaga	480
caatttattg	cctgagatga	aacatataac	atgtggctgg	ctcttgttt	gtaaaccaa	540
tgattaatct	tcacttgaga	aagcagttc	tagggaaatgt	ttaaataaaa	gagagtcttc	600
accttaaaga	aacctatgga	gcacaagaaa	gataaatttc	tgcaggacag	tctataaaa	660
tgtggtactt	tttgatgttt	cagtaaactt	gacattgtca	gagtttcaag	gactttctt	720
tcacaatttt	cctagttcat	ggatatgaaa	aaggaaattct	caatccatat	tccttgatt	780
gaaccttggaa	caaaaaacttg	tatgacagac	attttaaaaa	atgtgacaac	acttttattc	840
tctgaatttt	gatctcaaag	gacacagaaa	aaaaaattggcc	ccaggagatc	tgatcacact	900
tcctcctgag	gcacccctctca	tggatgttgc	aataagcatt	ogggtactat	caccagaaa	960
tatgaatttg	cagaatagaa	catttagcat	gttaagcggt	gatgcata	aaatcagaaa	1020
tagatgtgag	aatggtgaaa	cttttaaaaa	gaacccagtc	aatgtattt	tctgctgaaa	1080
tctgcatatt	tggaggcatt	tcccaccacc	gattcacagc	ccatTTgata	gtgtggtagt	1140
tagggacttc	gtggagtgg	gttcagacgt	ccccctgggc	ttaaatctct	tcatattagt	1200
catcatttgt	aactatggct	ttatTTgcag	agtttctaaa	aggcgtataa	ctgtgtgagt	1260
ggccagat	tcactttta	aatcaaaaaac	ctctttagt	gaagctttaa	agtttccgt	1320
cacacacaat	tctttctca	ggaagtattt	ctcatttagg	tcttcaaagt	agcctgactg	1380
tgtgcatgt	tgtgtgtat	aggttattt	taaagacttt	ggatagaagg	agatgtattt	1440
tattacctcc	tattcttagag	ccccatgc	ctaacaagcc	agagaggccc	caaacaggat	1500
tgtttcttc	ctccacagcc	tttctgccc	tctgagattt	agggagc	gtccacttga	1560
gatcaggat	gggggtggaga	atgggtcatg	tcatgtatg	agaaaaagccc	tettccggat	1620
catgagactt	ggttctagtc	caatttctgc	cactgaggat	gaatgttaact	gtggccaaac	1680
tatTTacctt	cctttatctg	tgaaatgaaa	gggttgaatt	gatggatctc	taaaggcttt	1740
tgtcctctat	gaggatgtga	aaaactaggg	accacaaaag	ggaacaagca	aaaaagttt	1800
gattcataa	agtatgtatgt	aatagttgca	gaaggcttta	tatatgctt	taatgaaaag	1860

&lt;210&gt; 16

&lt;211&gt; 1350

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1135)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1148)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1166)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1174)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1181)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; SITE

<222> (1209)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (1229)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (1266)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (1285)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (1287)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (1290)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (1295)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (1305)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (1324)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (1339)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (1341)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (1343)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (1345)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (1348)  
<223> n equals a,t,g, or c

<400> 16

ccgggtcgac	ccacgcgtcc	gccccggcgt	ggggttttag	agcctgaaat	ccgacttcaa	60
caagtactgg	gtcccccgtcg	tctggttcac	caacctggcg	gcccaggccc	ggagggacgg	120
gccaatacgt	gacgatatcg	ctctctgtct	acttttgaa	gagctgaaca	agtacccgagc	180
caagtgcagc	atgttatttc	actatgactg	gatcagcatc	ccccctcgct	acacccaagt	240
ggtgaccata	gccgtctact	ctttcttgc	cctctccctg	gttggccgccc	agtttgtgga	300
gccagaggca	ggggctgcca	aacctcagaa	gettttgaag	ccaggccagg	agccagcccc	360
agccctggga	gaccggaca	tgtacgtgcc	tctcaccact	ctgctgcagt	tcttcttcta	420
tgctggctgg	ctcaagggtgg	ctgaacagat	catcaacccca	tttgggtgagg	atgtacgaa	480
ctttgagaca	aatcagctca	tagaccgcaa	cttgcagggt	tccctgctat	ccgtggacga	540
aatgttaccag	aaccttcccc	ccgctgagaa	ggaccaggta	tgggatgagg	accagccgca	600
gccaccctac	actgtggcca	cgccggccga	gtctctgcgg	ccctcattcc	tgggctccac	660
cttcaacctc	cgcacatgagcg	acgaccctga	gcagagcctg	cagggtgggg	cgtccccccgg	720
atctggtcgg	cccgccggcccg	ccgcgcagac	cccggttgc	ggccgccttc	tgggctgtagg	780
ggcccccctcc	ccggccatca	gcctccggaa	cttccggccgc	gtgcgaggca	ccccccggccc	840
ccgcacatcg	ctgcgttcc	gggcggagga	gggcggcgac	cccgaggccg	cagccccat	900
cgaggaggaa	tcggcggaggt	ccggggacga	ggccctggag	ccctgagett	ttacaaggct	960
tgttccatgg	tgagaacgggt	catctgtgaa	ggtgttagaa	atggagaatg	gatggatttc	1020
aagactttag	agaaaagaacc	cactggttt	atggacagat	cttggctcac	tgcaacccctcc	1080
acctccccag	gttcaagaga	ttctcatgcc	tcagcctctc	aatgtactgg	gattncaggc	1140
acatgccncc	acaccctgtct	aattttttgt	atgnnttagta	nagatgggggt	ttcaccatgt	1200
tggccaggnt	ggtttttggaa	ctcctgaent	caagtgtatcc	acctgcttcg	gcctcccaaa	1260
gtgtctnggat	tacaggcgta	agccncnatin	cctgnccaaac	cttcnaattt	aataaaagtct	1320
caanactttt	ttcccaagna	nananaanaaa				1350

<210> 17  
<211> 1191  
<212> DNA  
<213> Homo sapiens

<400> 17

taatacgtact	cactataggg	aaagctggta	cgccctgcagg	taccggtccg	gaattccccgg	60
gtcgaccac	gcgtccgcgg	gatcagtggc	cgacagcgat	gccgtggta	aactagatga	120
tggccattta	aacaacttctt	tgagctctcc	agttcaagcg	gacgtgtact	tcccacgact	180
gatagttcca	ttttgtggc	acattaaagg	tggcatgaga	ccaggcaaga	aggtgttagt	240
gatgggcatac	gtagacctca	acccagagag	cttgcataatc	agttgaccc	gtggggactc	300
agaagaccct	cctggccatg	tggcaatcga	actcaaagct	gtgttacag	atcggcagct	360
actcagaaat	tcttgtatat	ctggggagag	gggtgaagaa	cagtcagccaa	tcccttactt	420
tccattcatt	ccagaccaggc	cattcagggt	ggaaattctt	tgtgagccacc	cacgtttccg	480
agtgtttgt	gatggacacc	aacttttga	tttttaccat	cgcattcaaa	cgttatctgc	540
aatttgcaccc	ataaagataa	atggagaccc	ccagatcacc	aagcttggct	gattaaacc	600
acctctattt	caaataaggat	cacgtgccac	aactatctga	ctgttggct	ggaagaagtg	660
tccttagcaag	atctggagac	ttaaaaagaa	aacaaaaaca	aatggcaagt	ttcacttaag	720
ggtggtttgc	ccttaagaag	aaagctgtg	ggacaaagac	accgagccat	tatacccaga	780
ataaaaataat	acatttatgc	tggattttat	tcagacccaa	ctaaaatgg	tttgtatga	840
tttgtatgtt	ggtagcaaat	tattcatctt	ttcaagcaa	ggcaatgtt	agaaacagaa	900
gtgctaaaga	cactaaaaaa	gccaacaaca	acggtagact	gaaatcaatg	catttctgca	960

ctaaagtgga attgtgttagc acaaccaata ttttagtcag ggtatttaca tagaatgtag	1020
gttgttcaag gtttgacttt tttttgttt ttgttttgc ttttgcaca	1080
gcataatgtt aattcagatt gttgaagctt tctttagttt atttatttat actcaatgtt	1140
tgtattaaag aatgaacaat gtctcaagaa caaaaaaaaaaaa aaaaaaaaaa a	1191

<210> 18  
<211> 806  
<212> DNA  
<213> Homo sapiens

<400> 18  
gctccgggcc ggcgtgcccc cgctcctgct gccgttgctg ggcctcgccg ctgctgccgt 60  
cgccgactgt cttcatcta cttggattca gttccaagac agttgttaca ttttctcca 120  
agaagccatc aaagtagaaa gcatagagga tgtcagaaat cagtgtactg accatggagc 180  
ggacatgata agcatacata atgaagaaga aaatgccttt atactggata ctttggaaaa 240  
gcaatggaaa ggcccagatg atatcctact aggcatttt tatgacacag atgatgcgag 300  
tttcaagtgg tttgataatt caaatatgac atttgataag tggacagacc aagatgtga 360  
tgaggattta gttgacacct gtgttttgc acacatcaag acaggtgaat ggaaaaaagg 420  
aaattgtgaa gtttctctg tggaaaggaac actatgc当地 acagctatcc catacaaaaag 480  
gaaatattta tcagataacc acattttaat atcagcattt gtgattgctt gcacggtaat 540  
tttgcacagg ttggagccaa tcattttgtt cctgtacaaa aaacattctg attctcggtt 600  
caccacagg tttcaaccg caccggaaatc accttataat gaagactgtg ttttggtagt 660  
tggagaagaa aatgaatatac ctgttcaatt tgactaagtt ttggtaatc ttgcactaag 720  
acatcaacaa aatgcctgg cagagataac ttggaaaga tttaatata aaacttgaca 780  
ttggaaaaaaa aaaaaaaaaaaa aaaaaaa 806

<210> 19  
<211> 2260  
<212> DNA  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (2225)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (2234)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (2253)  
<223> n equals a,t,g, or c

<220>  
<221> SITE  
<222> (2254)  
<223> n equals a,t,g, or c

<400> 19  
cccacgcgtc cggaggaaca gacttaccc agcaaccctg gcaccccaa cccgacacat 60  
gctactgctg ctgctactgc tgccaccctt gctctgtggg agagtggggg ctaaggaaca 120  
gaaggattac ctgctgacaa tgcagaagtc cgtgacgggtg caggaggggcc tttgtgtctc 180  
tgtgctttgc tccttctcc acccccaaaa tggctggact gcctccgatc cagttcatgg 240

09269826 - 012504

ctactggttc	cgggcagggg	accatgttaag	ccggaacatt	ccagtggcca	caaacaaccc	300
agctcgagca	gtgcaggagg	agactcggga	ccgattccac	ctccttgggg	acccacagaa	360
caaggattgt	accctgagca	ttagagacac	cagagagagt	gatgcaggga	catacgtctt	420
ttgtgttagag	agagaaaata	tgaaatggaa	ttataaaatat	gaccagctct	ctgtgaatgt	480
gacagcgtcc	caggacctac	tgtcaagata	caggctggag	gtgccagagt	cggtgactgt	540
gcaggagggt	ctgtgtgtct	ctgtgccctg	cagtgcctt	taccccccatt	acaactggac	600
tgcctctagc	cctgttatg	gatcctgggtt	caaggaaggg	gccgatatac	catggatata	660
tccagtggcc	acaaacaccc	caagtggaaa	agtgcagag	gatacccacg	gtcgattcct	720
cctccttggg	gaccacaga	ccaacaactg	ctccctgagc	atcagagatg	ccaggaaggg	780
ggattcaggg	aagtactact	tccaggtgga	gagaggaagc	aggaaatggaa	actacatata	840
tgacaagctc	tctgtgcatg	tgacagccct	gactcacatg	cccacccatt	ccatccccggg	900
gaccctggag	tctggccacc	ccaggaacct	gacctgctct	gtgccctggg	cctgtgaaca	960
ggggacgccc	cccacatca	cctggatggg	ggcctccgtg	tcctccctgg	acccactat	1020
cactcgctcc	tcatgtctca	gcctcatccc	acagccccag	gaccatggca	ccagcctcac	1080
ctgtcaggtg	accttgcctg	gggcccgggt	gaccatgacc	agggctgtcc	gactcaacat	1140
atcctatccc	cctcagaact	tgaccatgac	tgtcttccaa	ggagatggca	cagcatccac	1200
aaccttgagg	aatggctcg	ccctttca	cctggagggc	cagtccctgc	accttgtctg	1260
tgctgtcgac	agcaatcccc	ctgcccaggct	gagctggacc	tgggggagcc	tgaccctgag	1320
cccctcacag	tcctcgaacc	ttggggtgc	ggagctgcct	cgagtgcatg	tgaaggatga	1380
aggggaattc	acctgcccag	ctcagaaccc	tctaggctcc	cagcacattt	ccctgagcct	1440
ctccctgcaa	aacgagtaca	caggaaaaat	gaggcctata	tcaggagtga	cgctaggggc	1500
attcggggga	gctggagcca	cagccctgtt	cttctgtac	ttctgcatac	tcttcgttgc	1560
agtgggtcc	tgcaggaaga	aatcgcaag	gccagcagtg	gcgtggggga	tacaggcatg	1620
gaggacgcaa	acgctgtcag	gggctcagcc	tctcagggac	ccctgatgt	atccccggca	1680
gatgacagggc	ccccacacca	tgctccgcca	gccctggcca	ccccctcccc	agaggaagga	1740
gagatccagt	atgcatccct	cagcttccac	aaagcgaggc	ctcagtagccc	acaggaacag	1800
gaggccatcg	gctatgagta	ctccgagatc	aacatcccc	agtggaaac	tgcagagact	1860
caggcctgtt	tgagggctca	cgaccctgtc	agcaaaagaag	cccgagactg	attcctttag	1920
aattaacagc	cctccatgct	gtgcaacagg	acatcagaac	ttattccct	tgtcaaaactg	1980
aaaatgcgtg	cctgtatgacc	aaactctccc	tttctccatc	caatcggtcc	acactcccc	2040
cccccggcct	ctggtaccca	ccattctt	ctctacttct	ctgaggtcga	ctatTTAGG	2100
ttccaaatat	agtggatcg	tagagtgaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	2160
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	ataaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	2220
aaaaaaaaaa	aaanaattta	aaaaaaaaaa	aannaaaaaaa			2260

<210> 20  
<211> 1066  
<212> DNA  
<213> Homo sapiens

<400> 20						
caccacccgc	cgcacgacca	ccaggcgtcc	aacaaccaca	gtccgaacca	ctacgcggac	60
aaccaccacc	accacccccc	aacccacac	tcccatcccc	acctgtcccc	ctgggacatt	120
ggaacggcac	gacgatgtat	gcaacctgtat	aatgagctcc	aatgggatcc	cagagtgtat	180
cgctgaagaa	gatggatct	caggcttgg	gactgacact	gcagtaacta	cggaagaggc	240
ctacgttata	tatgtatgaa	attatgtatt	tgagacgtca	aggccaccaa	ccaccactga	300
gccttcgacc	actgtatcca	caccgagggt	gatcccagag	gaaggcgcca	tcaaggccctt	360
tcctgtggaa	gaatttgc	tggctggaa	gaaacgattt	gttgcctt	acgtgacgt	420
cctaaataaa	gaccatcag	ccccgtgtc	tctgactgtat	gcactggatc	acttccaaat	480
ggacagcctg	gatgaaatca	tccccatga	cctgtggaa	agtgtatgtc	ctccccagca	540
tgctcccccgc	aacatcaccg	tggtggccgt	ggaagggttgc	cactcatttgc	tcattgtgg	600
ctgggacaaaa	gccacccccc	gagatgtgg	cacaggttac	ttggtttaca	gtgcataccta	660
tgaagacttc	atcaggaaca	agtggccatc	tcaagttca	tcaacttc	acttgcctat	720
tgagaaccta	aagcccaaca	cgaggttata	ttttaaagtgc	caagcaca	atctctatgg	780
ctacggaccc	atcagccctt	cggtctcatt	tgtcaccgaa	tcaagataatc	ctctgtttgt	840
tgtgaggccc	ccagcgggtg	agcctatctg	gatcccatc	gctttcaaac	atgatcccc	900
ctacacggac	tgccatggac	ggcaatatgt	gaagcgcacg	ttggtatcga	aagttcgtgg	960

gagttggctt ttgttaattca ctgaggata aatctaccc cagtacaac ctgaaagatc	1020
attctacagc attggagaca gctggggaa gaagtgaaga ccattg	1066

<210> 21  
<211> 1872  
<212> DNA  
<213> Homo sapiens

<400> 21	
gcctccgggg ccccgtaat ctgcagcacc tcatttcag cgcaaccag ctggccgca	60
tcgcgcggg agccttcgac gacttcctag agaggctgga ggacctggac ctgtctaca	120
acaacctccg gcagtgccc tggccggca tcggccat gcctgcctg cacaccctca	180
acctggacca taaccttatt gacgcactgc ccccaggcgc cttcgcccaag ctcgtcagc	240
tctccgcct ggacctcacc tccaaccgcc tggccacgct ggctccggac ccgcctttct	300
ctcgtggcg tgatcagag gcctctcccg cccccctggc gctgagctt agcggaaacc	360
ccctgcactg caactgttag ctgctgtggc tgccggcgt ggcggccgg gacgacctgg	420
aaacgtgcgc ctccccggcc ggcctggccg ggcgtactt ctggcagtg cccgaggcg	480
agttctccgt tgagccggcc ctattgccc gccacacgca gcgcctctgg gtgcttggaa	540
gccagcgggc cacgtcggt tgccgggccc tgggtgaccc cgcccttacc atgcactgg	600
tcggctctga cgaccgggtt gttggcaact cctcccgagc ccggcctttc cccaaacggga	660
ccttagagat tggggcggacc ggcgtgggg acgctgggg ctacacctgc atcggccacca	720
accctgctgg tgagccaca gcccgtatg aactcgccgt gctggcttgc ccccatggtg	780
ggaacagcag tgccgggggg ggccgccccg ggcctcgga catcgccggc tccgtcgca	840
ctgctgccc gggtaggggg acgctggagt ctgagccagc cgtgcaggtg acggaggtga	900
ccggccaccc agggctgggt agctggggc ccggccggcc agccgaccca gtgtggatgt	960
tccaaatcca gtacaacacg agcgaagatg agaccctcat ctaccggatt gtccagcct	1020
ccagccacca cttccgtcg aagcacctcg tccccggcgc tgactatgac ctctgcctgc	1080
tggccttgc accggccgtt gggccctctg acctcacggc caccaggctg ctggctgtg	1140
cccatttctc cacgtcgccg gcctcgcccc tgtgccacgc cctgcaggcc cacgtctgg	1200
gcgggaccc gaccgtggcc tgggggggtg tgctgtggc tgccttactg gtcttactg	1260
tggccttgc gttccgggc cggggggccg gaaatggccg cctcccccctc aagctcagcc	1320
acgtccagtc ccagaccaat ggaggccccca gcccacacc caaggcccac ccgcgcggaa	1380
gccccccggcc ccggccgcag cgacgtgtt ctctggaccc gggagatgcc ggggtctacg	1440
gttatgccc ggcgttggg ggagcttggg cccgacggag ccactctgtg catggggggc	1500
tgctcggggc agggtgcggg ggggttaggag gcagcggcga gcggctggaa gagagtgtgg	1560
tgtgatggac gggcagctt ctgtgtgtc caaggatga gcctcggtt gcagaggccc	1620
cgggggccccc gcctggccctg ggagtccctc cctgtttttt attctcagta cctcaggctc	1680
ccctgtgtac ttggggggc agggagccct ttcctcggtt ctggcctcca gaccaggta	1740
agggcaggcc cctccaacag gtgctcacag ccaccgaggc agggctgca gccacccact	1800
gggagttctg ttttattta taataaaatt gttggggaca cctcaaaaaaaa aaaaaaaaaa	1860
aaaaaaaaaa aa	1872

<210> 22  
<211> 1898  
<212> DNA  
<213> Homo sapiens

<400> 22	
tcgacccacg cgtccggcca cgcgtccggc cgctcgccg cccggcttga ggcccgccgg	60
gagcgcggcg caattcgatcg gcccgggggg gggccggctc ccggcattt cgccgcgacc	120
aaggactacc aggaaggggg gggctggga tggccgtcc gggccccccg gagtacaaag	180
cgggcgacct ggtttcgcc aagatgaagg gctacccgca ctggccggcc cggattgtat	240
aactcccaaga gggcgtgtg aacgcctccag caaacaaatgtt ccattatctt tttttggca	300
cccatgaaac tgcatttcta ggtcccaaag accttttcc atataaggag tacaaagaca	360
agtttggaaa gtcaacaaa cggaaaggat ttaacgaagg attgtggaa atagaaaata	420
acccaggagg aaagtttact ggctaccagg caattcagca acagagctt tcagaaactg	480

agggagaagg	tggaaatact	gcagatgcaa	gcagtggaga	agaaggtgat	agagtagaaag	540
aagatggaaa	aggcaaaaga	aagaatgaaa	aaggcaggctc	aaaacggaaa	aagtcatata	600
cttcaagaa	atctctaaa	cagtcccgga	aatctccagg	agatgaagat	gacaagact	660
gcaaagaaga	ggaaaacaaa	agcagctctg	agggtggaga	tgcgggcaac	gacacaagaa	720
acacaacttc	agacttgcag	aaaaccagtg	aagggaccta	actaccataa	tgaatgctgc	780
atattaagag	aaaccacaag	aaggttatat	gttgggtgt	ctaattttct	tggatttgat	840
atgaaccaac	acatagtcct	tgttgtcatt	gacagaaccc	cagttgtat	gtacattatt	900
catattcctc	tctgtgtgt	tccggggga	aaagacattt	tagcctttt	taaaagttac	960
tgatTTAATT	tcatgttatt	tggttgcatt	aaggttccct	taccactaag	gattatcaag	1020
atTTTGCCTC	agacttatac	atgtctagga	tcctttatc	aaggcagttt	tgatcatcg	1080
tttcctgcct	tgccccacca	tcatcaaaca	ctcagttaaa	tattaaatta	accatTTTT	1140
agattgaccc	actcaacctt	aatggctta	agaaatggga	atttccttct	yttgtggacm	1200
gaaaccccag	gaatttaaat	tcccttaaaa	tacmcttaac	cgttggkatt	atttggaaag	1260
accgaaaatt	wtaawwrtc	cttcagttt	gaggccatgt	gtaaagttt	accatattgt	1320
aaaatatact	ttcctgtatta	gaaatagcta	gttgacagct	tatacttctc	aaaattcata	1380
ttgttatgt	cacaaactaa	gtttctat	gtgaagttag	tgagtcttt	tgtgttactc	1440
caaaataaaag	gcaatgattt	attttttcc	cagtgcatt	acaattttga	gctaagcact	1500
caaggtggat	actttacatt	ttaaagctgg	aatcagcaac	agccctatgg	gaaaccagac	1560
aaagcattga	cttttaaatg	tagactttt	aaataaaactg	gttctttgg	aactacaatt	1620
agaatagtt	atattcatcc	ttaaaccatt	attatgtgt	cattattgtt	gctattgtga	1680
taatagagaa	ttttatTTT	tttatgcca	gcttataattg	tgagaacaca	tttagtca	1740
ttgggggttt	atcaatcctg	ttaatgcctt	tccttggaaac	atcttcgcgt	attcacgggt	1800
tgtagttgaa	aaagttactg	taaaaaaaatc	aaaaacccaa	aaatgtattt	gtttaccgaa	1860
taaaattatt	ggaatggaaa	aaaaaaaaaa	aaaataat			1898

```
<210> 23  
<211> 1865  
<212> DNA  
<213> Homo sapiens
```

```

<400> 23
cgaaccgggg gtggaaggga atgaagaaaa tgactcttct ctgaagacag gacttgagaa
aatcgagggt ggcaagatgg caccgaagcc ccagtctcgc tgcacctcta cccgctcagc
aggtgaggcc ccttcagaaa atcagagtcc ctcaaaaggc cctgaagagg ccagcagtga
ggttcaggac acaaatacgaa tgcatgtgcc tggtgatcag gatgaaccac agacattggg
caaaaagggc agcaaaaaca atatctctgt ttatatgacc ctaaatcaaa agaaaatctga
ctcttcagggt gcttcagggt gttagcattga tagcacagat gatttggaaat ctccaactc
tgagtgttagt tcttcgaaa gctttgattt tcctccaggc agtatgcatt caccccccac
ctccctccact tcctcctctt caaaggaga gaaaaagctc agtaattcct tgaaaatgaa
agtctttcc aaaaacgtct ctaaatgcgt cacaccagat ggcaggacca tatgtgttagg
ggacattgtt tgggccaaga tatatggctt cccttggtgg ccagcccgta ttcttactat
aactgtgagc cgaaaaagata acggcctttt agtccgacag gaggcccgta tttcatggtt
tgggtctcca acaacatctt tccttgcctt ttccacaactc tccccctttt tagaaaactt
ccagtcacgc ttataataaga agagaaaaggg cctgtatcgc aaggctatca cagaggcagc
taaggctgcc aaggcagctga ccccccgaagt gcgggcttgt tgacacagtt tgaaaacgtga
acatgggcag taaggttaggc aagaccattg gaagtccacca cagattttct agtctagtt
ggaataattt ctacaaaaat agcgtggcca gattggagag agaagttgca ctcagttggc
tggctttta atacttacct tatagccatt ttagactga ggagcttaaa ctgaacatata
aatcaaattt tgggttaagg aagttagatt ttagcagttt tttcagttt tgaagttcga
aaccatcccc aggcatagga gccatagcct caactgaaaat tgaattttt tagggactgt
taattgccccat ttgtacctaa tactgtatata atacatataat atacgtgtgt gtgtatata
atatatataat atatatataat atatatatcc gtgtatgtat atatacacac atatatatgt
atatatatac ac atatatataat atgaaataca gcctgtcact gtgtgacaca gattgcata
ttgggattgc aataagggtt tggtgagctg gggaaatagt ggtatattaa tgactacttg
tttttaaat aatgaacact tagcccttct atgcgcataa tggtgtaaaa gttagatggt
taggtgtttt acaaacagat ggttgcaatt cagttacaga ctggggaaat agcccaagtgt
ttgggattaa aactgtcaag actggatagg tggtagtcat cactgtcttt cgtccaggc

```

ggatttaata aatacttca agcttcttgt ttggaggtt agataggttt gattttggat	1620
ttgtaaatag tgattgctaa atttgcgtc atttctccctg actggctgtt cctaaattct	1680
taggatatgt cccagtaaaa ttatactttg tgaattaatt gtcatatgtg taattgttgc	1740
attttggatg tacctaattt gataattaa acaaataat ttccgtttaa ggtatctgtt	1800
tgcaggtcag aaaatgagaa aatgttaattt tgtaatgctc tgaaatgtaa aaaaaaaaaaa	1860
aaaaaa	1865

<210> 24  
<211> 1297  
<212> DNA  
<213> Homo sapiens

<400> 24	
cgctgcagcc gcttcccgcg gcctgggct ctcgcgtca gcatgccaca cgccccaag	60
cccggggact tgggttgcg taagatgaag ggctaccctc actggcctgc caggatcgac	120
gacatcgccg atggcgccgt gaagccccca cccaaacaagt accccatctt tttctttggc	180
acacacgaaa cagccttcct gggacccaag gacctgttcc cctacgacaa atgtaaagac	240
aagtacggga agcccaacaa gaggaaaggc ttcaatgaag ggctgtggga gatccagaac	300
aaccccccacg ccagctacag cgccccctccg ccagttagct cctccgacag cgaggcccc	360
gaggccaaacc cgcgcgacgg cagttagct gacgaggacg atgaggacccg ggggggtcatg	420
gccgtcacag cggttaaccgc cacagctgcc agcgacacgaa tggagagcga ctcagactca	480
gacaagagta ggcacaacag tggcctgaag aggaagacgc ctgcgtctaa gatgtcggtc	540
tcgaaacaggag cccgaaaaggc ctccagcgac ctggatcagg ccagegtgtc cccatccgaa	600
gaggagaact cggaaagctc atcttagtgc gagaagacca gcgcacccgaa cttcacacct	660
gagaagaaaag cagcggtccg ggcgcacccg aggccccctc tggggggacg aaaaaaaaaa	720
aaaggcgcgt cagcctcccg ctccgactcc aaggccgatt cggacggggc caagcctgag	780
ccggtgccca tggcgccgtc ggcgtccctc tcctccctt cctccctctc ctccgactcc	840
gatgtgtctg ttaagaaaacc tccgaggggc aggaagccaa cggaaaaacc tctcccgaa	900
ccgcgaggggc gggaaaccgaa gcctgaacccg cctccgtcca gctccagcag tgacagtgc	960
agcgacgaag tggaccccat cacttaatgg aatccgggg acaagcgcgg aagcgccaa	1020
tggaaaggccg gcccggccgca aagcagaaga ggagctgcgg cgcctgcggg agcagaaaaa	1080
aagagaagaa cggagcgcga acggggccgac cgcggggagc tactgggcac ggcggcacac	1140
cgggacgaac tcacccaaga catacccgcc cataaccggg accaaggccg ggcgggtcc	1200
cctctccctt gactcgaaacc cagcgactga taatagccaa atctctaaac gcatctctac	1260
ccaaacccgc cagaaactgc cttagataaaa aattcgg	1297

<210> 25  
<211> 577  
<212> DNA  
<213> Homo sapiens

<400> 25	
ggcacgagga atgaagaaga tggggcttc atagtcttga atagaaaaga aggctcagg	60
ctggattca gtgtggcagg agggacagat gtggagccaa aatcaatcac ggtccacagg	120
gtgttttctc agggggccgc ttctcaggaa gggactatga accgaggggg tttcttctg	180
tcagtcaacg ggcgcctcact ggctggctt gcccacggga atgtcctgaa gggtctgcac	240
caggcacacg tgcacaaaaga tggccctcggt gtcatcaaga aagggtatgg tcagcccagg	300
ccctctggcc ggcaggagcc tcccacagcc aatgggaagg gtttgcgtc cagaaagacc	360
atccccctgg agcctggcat tggtaagatg atcatttcaa caaccagcag gctgtgagct	420
actgcagaaaa gaggagattc tgggtgaaca tgaaggaaaa taacagctaa ctaacttcta	480
gatctgaaaa attaaatgtt gcaagtcgtt gtgttttgg atgctgctt caaaaggcgt	540
gttacaaaata aattagaaaa aaaaaaaaaa aaaaaaa	577

<210> 26  
<211> 675

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 26

ggcacgagag atggcggcct ccgtgtcgag	cgggttgcgt gggccacggg tgctgtcctg	60
gagccgagag ctgccttcgc cttggcgccc	cctgcacacc tccccggctc ggcacaagaa	120
ccggggcgccc cgagtagcgcg taagcaaggg	ggacaagccg gtgacctaag aggaggcaca	180
cgcgcgcac tacatcgccc accgtaaagg	ctggctgtcg ctgcacacag gtaaccttgg	240
tggagaggac catggcgag agcgaacgg	ggagatgtt ttcccttcgca agttcatgtg	300
gggtacccctt ccagctgccc tggctgacca	gctgtttta aagcgcggg gtaaccagtt	360
ggagatctgt gccgtggcc tgagggcagg	gtctccacac aagtactact tcctcgtggg	420
ctacagtgaa actttgctgt cctactttta	caaatgtctt gtgcgactcc acctccaaac	480
tgtgccttca aaggttgtgt ataagtacct	ctagaacaat cccctttttt ccatcaagct	540
gtagcctgca gagaatggaa acgtggaaa	ggaatggtat gtggggaaa tgcatcccct	600
cagaggactg aggcatagtc ttcatctgc	tattgaataa agaccttcta tcttgaaaaaa	660
aaaaaaaaaa aaaaaa		675

&lt;210&gt; 27

&lt;211&gt; 1558

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 27

cgagaaaccg cgcttcggct tctggtcgca	gagacctcg ggaccgcgcc ggggagacgg	60
agggtctgtg ggtggggggg acctgtggct	gctcgtaacc ccccccaccc tcctttctg	120
cactgcccgc	ctccggaaaga cttttcccc tgctctgtt ccttcacccga	180
cgccccggac	ctggccggga ggaggcttgg ccggcgggag	240
gaggagcggc	atgctctagg ggcgcgcgg	300
cttgctggcg	cggccggacg gagggccccg caggaagatg	360
ccatgtccag	ggctcccgat gacagggact	420
ccatgccgag	aggagtggg gggactgag gagctgcgt	480
ccctgtttcc	aaaatacagg cccagtcagg accagggact	540
cgtgccccag	cggtgcttgc gctgctgtga ccccggtacc	600
cctccaaggg	tccatgttacc cggcgcaccgc	660
agggcagaag	atcaacatca ctatctgaa agggagaag	720
ggctccatgg	ggtgaccgcg gagatcgagg	780
ttcgggtggc	aaatatggca aaacaggcgc	840
cgaagaagc	agcaggggcc aggggccaca	900
ccatgcacag	ctggacccaa	960
caaccactac	ggccatggc	1020
taccagacgg	ttcgtcgac	1080
tgatttcga	tggtgtgggt	1140
acgaccact	acccggcaatg	1200
caacatgttc	tctactgtca	1260
accggcgttgc	ttcccttcgc	1320
ggcttgcgttgc	caccccccac	1380
ttcccttcgc	ccctcgctg	1440
cccccaccc	tgctgacccc	1500
ttcccttcgc	agggtctcagc	1558
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	
cccccaccc	ccctcgctg	
ttcccttcgc	tgctgacccc	
cccccaccc	agggtctcagc	
ttcccttcgc	accaggctga	
cccccaccc	ttcccttcgc	
ttcccttcgc	ccctcgctg	
cccccaccc	tgctgacccc	
ttcccttcgc	agggtctcagc	
cccccaccc	accaggctga	
ttcccttcgc	ttcccttcgc	

atgaagggggaa	gccgtgcctt	cctgctggtg	gccctcaccc	tgttctgcat	ctgcccggatg	60
gccacgggggg	aggacaacga	tgagtttttc	atggacttcc	tgcaaacact	actggtgaaaa	120
acccccagagg	agctctatga	ggggaccttg	ggcaagtaca	atgtcaacga	agatgccaag	180
gcagcaatga	ctgaactcaa	gtcctgcata	gatggcctgc	agccaatgca	caaggcggag	240
ctggtaaagg	tgctggtgca	agtgcgggac	agtcaggacg	gtgcccgtac	cgattacaag	300
gacgacgatg	acaagtagta	ctgggtggca	tccctgtac	ccctccccag	tgcctctcct	360
ggccctggaa	gttggccactc	cagtggccac	cagccttgac	ctaataaaaat	taagttgcat	420
cattttgtct	gactagggtgt	ccttctataa	tattatgggg	tggaggggggg	tggtatggag	480
caaggggcaa	gttggaaaga	caacctgtag	ggcctgcggg	gtctattggg	aaccaagctg	540
gagtgcagtg	gcacaatctt	ggc				563

<210> 29  
<211> 2139  
<212> DNA  
<213> Homo sapiens

<400> 29						
ggaggaacag	acttacctca	gcaaccctgg	caccccaac	ccgacacatg	ctactgctgc	60
tgctactgct	gccacccttg	ctctgtggga	gagtgggggc	taaggaacag	aaggattacc	120
tgctgacaat	gcagaagtcc	gtgacgggtgc	aggagggcct	gtgtgtctct	gtgtttgtct	180
ccttctccta	cccccaaaat	ggctggactg	cctccgatcc	agttcatggc	tactgggtcc	240
gggcaggggg	ccatgtaaagc	cggaacattc	cagtgccac	aaacaaccca	gctcgagcag	300
tgcaggagga	gactcgggac	cgattccacc	tccttgggg	cccacagaac	aaggattgt	360
ccctgagcat	cagagacacc	agagagagt	atgcaggac	atacgtctt	tgttagaga	420
gaggaaatat	gaaatggaat	tataaatatg	accagctctc	tgtgaatgt	acagcgtccc	480
aggacctact	gtcaagatac	aggctggagg	tgccagagtc	ggtgactgt	caggagggtc	540
tgtgtgtctc	tgtccctgc	agtgtccctt	accccccatta	caactggact	gcctctagcc	600
ctgttatgg	atcttggttc	aaggaagggg	ccgatatacc	atgggatatt	ccagtggcca	660
caaacacccc	aagtggaaaa	gtgcaagagg	ataccacgg	tcgatttctc	ctccttgggg	720
acccacagac	caacaactgc	tccctgagca	tcaagatgc	caggaagggg	gattcaggga	780
agtactactt	ccaggtggag	agaggaagca	ggaaatggaa	ctacatatat	gacaagctct	840
ctgtgcattgt	gacagccctg	actcacatgc	ccaccccttc	catcccgccc	accctggagt	900
ctggccaccc	cagaacactg	acctgctctg	tgccctgggc	ctgtgaacag	gggacgcccc	960
ccacgatcac	ctggatgggg	gcctccgtgt	cctcccttgg	ccccactatc	actcgctct	1020
cgatgctcag	cctcateccca	cagccccagg	accatggcac	cagcctcacc	tgtcagggtga	1080
ccttgcctgg	ggccggcgtg	accatgacca	gggctgtccg	actcaacata	tcctatcctc	1140
ctcagaactt	gaccatgact	gtcttccaag	gagatggcac	agcatccaca	accttgagga	1200
atggctcggc	ccttcagtc	ctggaggggc	agttccctgc	ccttgcgtgt	gctgtcgaca	1260
gcaatcccc	tgccaggctg	agctggac	gggggagcct	gaccctgagc	ccctcacagt	1320
cctcgaacct	tgggtgtctg	gagctgcctc	gagtgcatgt	gaaggatgaa	gggaaatcca	1380
cctgccgagc	tcagaaccct	ctaggctccc	agcacatttc	cctgagcctc	tccctgcaaa	1440
acgagtacac	aggcaaaaatg	aggcctata	caggagtgc	gctagggca	tccggggag	1500
ctggagccac	agccctggtc	ttcctgtact	tctgcatcat	ttcgttgta	gtgagggtcct	1560
gcaggaagaa	atcggtcaagg	ccagcagtgg	gcgtggggga	tacaggcatg	gaggacgcaa	1620
acgctgtcag	gggctcagcc	tctcaggggac	ccctgattga	atccccggca	gatgacagcc	1680
ccccacacca	tgctccgcca	gccctggcca	ccccctcccc	agaggaagga	gagatccagt	1740
atgcattccct	cagttccac	aaagcgaggc	ctcagtaccc	acaggaacag	gaggccatcg	1800
gctatgagta	ctccgagatc	aacatcccc	agtgagaaaac	tgcagagact	caggectgtt	1860
tgagggctca	cgaccctgc	agcaaagaag	cccgagactg	attcctttag	aattaacagc	1920
cctccatgt	gtgcaacagg	acatcagaac	ttattctct	tgtcaaactg	aaaatgcgtg	1980
cctgatgacc	aaactctccc	tttctccatc	caatcggtcc	acactcccc	ccccggcct	2040
ctggtaaccca	ccattctctt	ctctacttct	ctgaggtcga	ctattttagg	ttccaaatat	2100
agtgagatcg	tagagtaaa	aaaaaaaaaa	aaaaaaaaaa			2139

<210> 30  
<211> 184

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 30

Met Lys Ala Leu Gly Ala Val Leu Leu Ala Leu Leu Cys Gly Arg

1

5

10

15

Pro Gly Arg Gly Gln Thr Gln Glu Glu Glu Glu Asp Glu Asp

20

25

30

His Gly Pro Asp Asp Tyr Asp Glu Glu Asp Glu Asp Glu Val Glu Glu

35

40

45

Glu Glu Thr Asn Arg Leu Pro Gly Gly Arg Ser Arg Val Leu Leu Arg

50

55

60

Cys Tyr Thr Cys Lys Ser Leu Pro Arg Asp Glu Arg Cys Asn Leu Thr

65

70

75

80

Gln Asn Cys Ser His Gly Gln Thr Cys Thr Thr Leu Ile Ala His Gly

85

90

95

Asn Thr Glu Ser Gly Leu Leu Thr Thr His Ser Thr Trp Cys Thr Asp

100

105

110

Ser Cys Gln Pro Ile Thr Lys Thr Val Glu Gly Thr Gln Val Thr Met

115

120

125

Thr Cys Cys Gln Ser Ser Leu Cys Asn Val Pro Pro Trp Gln Ser Ser

130

135

140

Arg Val Gln Asp Pro Thr Gly Lys Gly Ala Gly Gly Pro Arg Gly Ser

145

150

155

160

Ser Glu Thr Val Gly Ala Ala Leu Leu Asn Leu Leu Ala Gly Leu

165

170

175

Gly Ala Met Gly Ala Arg Arg Pro

180

&lt;210&gt; 31

&lt;211&gt; 352

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 31

Met Val Glu Ala Leu Arg Ala Gly Ser Ala Arg Leu Val Ala Ala Pro

1

5

10

15

Val Ala Thr Ala Asn Pro Ala Arg Cys Leu Ala Leu Asn Val Ser Leu

20

25

30

Arg Glu Trp Thr Ala Arg Tyr Gly Ala Ala Pro Ala Ala Pro Arg Cys

35

40

45

Asp Ala Leu Asp Gly Asp Ala Val Val Leu Leu Arg Ala Arg Asp Leu

50

55

60

Phe Asn Leu Ser Ala Pro Leu Ala Arg Pro Val Gly Thr Ser Leu Phe  
 65 70 75 80  
 Leu Gln Thr Ala Leu Arg Gly Trp Ala Val Gln Leu Leu Asp Leu Thr  
 85 90 95  
 Phe Ala Ala Ala Arg Gln Pro Pro Leu Ala Thr Ala His Ala Arg Trp  
 100 105 110  
 Lys Ala Glu Arg Glu Gly Arg Ala Arg Arg Ala Ala Leu Leu Arg Ala  
 115 120 125  
 Leu Gly Ile Arg Leu Val Ser Trp Glu Gly Gly Arg Leu Glu Trp Phe  
 130 135 140  
 Gly Cys Asn Lys Glu Thr Thr Arg Cys Phe Gly Thr Val Val Gly Asp  
 145 150 155 160  
 Thr Pro Ala Tyr Leu Tyr Glu Glu Arg Trp Thr Pro Pro Cys Cys Leu  
 165 170 175  
 Arg Ala Leu Arg Glu Thr Ala Arg Tyr Val Val Gly Val Leu Glu Ala  
 180 185 190  
 Ala Gly Val Arg Tyr Trp Leu Glu Gly Gly Ser Leu Leu Gly Ala Ala  
 195 200 205  
 Arg His Gly Asp Ile Ile Pro Trp Asp Tyr Asp Val Asp Leu Gly Ile  
 210 215 220  
 Tyr Leu Glu Asp Val Gly Asn Cys Glu Gln Leu Arg Gly Ala Glu Ala  
 225 230 235 240  
 Gly Ser Val Val Asp Glu Arg Gly Phe Val Trp Glu Lys Ala Val Glu  
 245 250 255  
 Gly Asp Phe Phe Arg Val Gln Tyr Ser Glu Ser Asn His Leu His Val  
 260 265 270  
 Asp Leu Trp Pro Phe Tyr Pro Arg Asn Gly Val Met Thr Lys Asp Thr  
 275 280 285  
 Trp Leu Asp His Arg Gln Asp Val Glu Phe Pro Glu His Phe Leu Gln  
 290 295 300  
 Pro Leu Val Pro Leu Pro Phe Ala Gly Phe Val Ala Gln Ala Pro Asn  
 305 310 315 320  
 Asn Tyr Arg Arg Phe Leu Glu Leu Lys Phe Gly Pro Gly Val Ile Glu  
 325 330 335  
 Asn Pro Gln Tyr Pro Asn Pro Ala Leu Leu Ser Leu Thr Gly Ser Gly  
 340 345 350



Lys Ala Gly Ala Leu Asn Leu Asp Ile Thr Gly Gln Leu Arg Ser Asp  
 275                    280                    285

Asp Asn Leu Leu Asn Thr Ser Ala Leu Gly Arg Leu Ile Pro Glu Val  
 290                    295                    300

Ala Arg Gln Phe Pro Glu Pro Met Pro Val Val Leu Lys Val Arg Leu  
 305                    310                    315                    320

Gly Ala Thr Pro Val Ala Met Leu His Thr Asn Asn Ala Thr Leu Arg  
 325                    330                    335

Leu Gln Pro Phe Val Glu Val Leu Ala Thr Ala Ser Asn Ser Ala Phe  
 340                    345                    350

Gln Ser Leu Phe Ser Leu Asp Val Val Val Asn Leu Arg Leu Gln Leu  
 355                    360                    365

Ser Val Ser Lys Val Lys Leu Gln Gly Thr Thr Ser Val Leu Gly Asp  
 370                    375                    380

Val Gln Leu Thr Val Ala Ser Ser Asn Val Gly Phe Ile Asp Thr Asp  
 385                    390                    395                    400

Gln Val Arg Thr Leu Met Gly Thr Val Phe Glu Lys Pro Leu Leu Asp  
 405                    410                    415

His Leu Asn Ala Leu Leu Ala Met Gly Ile Ala Leu Pro Gly Val Val  
 420                    425                    430

Asn Leu His Tyr Val Pro Leu Arg Ser Leu Ser Met Arg Ala Thr Trp  
 435                    440                    445

<210> 33  
<211> 183  
<212> PRT  
<213> Homo sapiens

<400> 33  
Met Glu Pro Glu Glu Gly Thr Pro Leu Trp Arg Leu Gln Lys Leu Pro  
 1                    5                    10                    15

Ala Glu Leu Gly Pro Gln Leu Leu His Lys Ile Ile Asp Gly Ile Cys  
 20                    25                    30

Gly Arg Ala Tyr Pro Val Tyr Gln Asp Tyr His Thr Val Trp Glu Ser  
 35                    40                    45

Glu Glu Trp Met His Val Leu Glu Asp Ile Ala Lys Phe Phe Lys Ala  
 50                    55                    60

Ile Val Gly Lys Asn Leu Pro Asp Glu Glu Ile Phe Gln Gln Leu Asn  
 65                    70                    75                    80

Gln Leu Asn Ser Leu His Gln Glu Thr Ile Met Lys Cys Val Lys Ser  
 85 90 95

Arg Lys Asp Glu Ile Lys Gln Ala Leu Ser Arg Glu Ile Val Ala Ile  
 100 105 110

Ser Ser Ala Gln Leu Gln Asp Phe Asp Trp Gln Val Lys Leu Ala Leu  
 115 120 125

Ser Ser Asp Lys Ile Ala Ala Leu Arg Met Pro Leu Leu Ser Leu His  
 130 135 140

Leu Asp Val Lys Glu Asn Gly Glu Val Lys Pro Tyr Ser Ile Glu Met  
 145 150 155 160

Ser Arg Glu Glu Leu Gln Asn Leu Ile Gln Ser Leu Glu Ala Ala Asn  
 165 170 175

Lys Val Val Leu Gln Leu Lys  
 180

<210> 34

<211> 121

<212> PRT

<213> Homo sapiens

<400> 34

Met Pro Cys Gly Arg Gln His Leu Gln Asn Leu Asp Asp Ala Val Asn  
 1 5 10 15

Gly Ser Ala Trp Thr Ile Leu Leu Thr Glu Asn Phe Leu Arg Asp  
 20 25 30

Thr Trp Cys Asn Phe Gln Phe Tyr Thr Ser Leu Met Asn Ser Val Asn  
 35 40 45

Arg Gln His Lys Tyr Asn Ser Val Ile Pro Met Arg Pro Leu Asn Asn  
 50 55 60

Pro Leu Pro Arg Glu Arg Thr Pro Phe Ala Leu Gln Thr Ile Asn Ala  
 65 70 75 80

Leu Glu Glu Glu Ser Arg Gly Phe Pro Thr Gln Val Glu Arg Ile Phe  
 85 90 95

Gln Glu Ser Val Tyr Lys Thr Gln Gln Thr Ile Trp Lys Glu Thr Arg  
 100 105 110

Asn Met Val Gln Arg Gln Phe Ile Ala  
 115 120

<210> 35

<211> 251

<212> PRT

<213> Homo sapiens

<400> 35  
 Met Leu Phe His Tyr Asp Trp Ile Ser Ile Pro Leu Val Tyr Thr Gln  
 1 5 10 15

Val Val Thr Ile Ala Val Tyr Ser Phe Phe Ala Leu Ser Leu Val Gly  
 20 25 30

Arg Gln Phe Val Glu Pro Glu Ala Gly Ala Ala Lys Pro Gln Lys Leu  
 35 40 45

Leu Lys Pro Gly Gln Glu Pro Ala Pro Ala Leu Gly Asp Pro Asp Met  
 50 55 60

Tyr Val Pro Leu Thr Thr Leu Leu Gln Phe Phe Tyr Ala Gly Trp  
 65 70 75 80

Leu Lys Val Ala Glu Gln Ile Ile Asn Pro Phe Gly Glu Asp Asp Asp  
 85 90 95

Asp Phe Glu Thr Asn Gln Leu Ile Asp Arg Asn Leu Gln Val Ser Leu  
 100 105 110

Leu Ser Val Asp Glu Met Tyr Gln Asn Leu Pro Pro Ala Glu Lys Asp  
 115 120 125

Gln Tyr Trp Asp Glu Asp Gln Pro Gln Pro Pro Tyr Thr Val Ala Thr  
 130 135 140

Ala Ala Glu Ser Leu Arg Pro Ser Phe Leu Gly Ser Thr Phe Asn Leu  
 145 150 155 160

Arg Met Ser Asp Asp Pro Glu Gln Ser Leu Gln Val Glu Ala Ser Pro  
 165 170 175

Gly Ser Gly Arg Pro Ala Pro Ala Ala Gln Thr Pro Leu Leu Gly Arg  
 180 185 190

Phe Leu Gly Val Gly Ala Pro Ser Pro Ala Ile Ser Leu Arg Asn Phe  
 195 200 205

Gly Arg Val Arg Gly Thr Pro Arg Pro Pro His Leu Leu Arg Phe Arg  
 210 215 220

Ala Glu Glu Gly Gly Asp Pro Glu Ala Ala Ala Arg Ile Glu Glu Glu  
 225 230 235 240

Ser Ala Glu Ser Gly Asp Glu Ala Leu Glu Pro  
 245 250

<210> 36  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 36  
 Met Arg Pro Gly Lys Lys Val Leu Val Met Gly Ile Val Asp Leu Asn  
 1 5 10 15

Pro Glu Ser Phe Ala Ile Ser Leu Thr Cys Gly Asp Ser Glu Asp Pro  
 20 25 30

Pro Ala Asp Val Ala Ile Glu Leu Lys Ala Val Phe Thr Asp Arg Gln  
 35 40 45

Leu Leu Arg Asn Ser Cys Ile Ser Gly Glu Arg Gly Glu Glu Gln Ser  
 50 55 60

Ala Ile Pro Tyr Phe Pro Phe Ile Pro Asp Gln Pro Phe Arg Val Glu  
 65 70 75 80

Ile Leu Cys Glu His Pro Arg Phe Arg Val Phe Val Asp Gly His Gln  
 85 90 95

Leu Phe Asp Phe Tyr His Arg Ile Gln Thr Leu Ser Ala Ile Asp Thr  
 100 105 110

Ile Lys Ile Asn Gly Asp Leu Gln Ile Thr Lys Leu Gly  
 115 120 125

<210> 37

<211> 170

<212> PRT

<213> Homo sapiens

<400> 37

Met Ile Ser Ile His Asn Glu Glu Asn Ala Phe Ile Leu Asp Thr  
 1 5 10 15

Leu Lys Lys Gln Trp Lys Gly Pro Asp Asp Ile Leu Leu Gly Met Phe  
 20 25 30

Tyr Asp Thr Asp Asp Ala Ser Phe Lys Trp Phe Asp Asn Ser Asn Met  
 35 40 45

Thr Phe Asp Lys Trp Thr Asp Gln Asp Asp Asp Glu Asp Leu Val Asp  
 50 55 60

Thr Cys Ala Phe Leu His Ile Lys Thr Gly Glu Trp Lys Lys Gly Asn  
 65 70 75 80

Cys Glu Val Ser Ser Val Glu Gly Thr Leu Cys Lys Thr Ala Ile Pro  
 85 90 95

Tyr Lys Arg Lys Tyr Leu Ser Asp Asn His Ile Leu Ile Ser Ala Leu  
 100 105 110

Val Ile Ala Ser Thr Val Ile Leu Thr Val Leu Gly Ala Ile Ile Trp  
 115 120 125

Phe Leu Tyr Lys Lys His Ser Asp Ser Arg Phe Thr Thr Val Phe Ser  
 130 135 140

Thr Ala Pro Gln Ser Pro Tyr Asn Glu Asp Cys Val Leu Val Val Gly  
 145 150 155 160

Glu Glu Asn Glu Tyr Pro Val Gln Phe Asp  
 165 170

<210> 38  
 <211> 535  
 <212> PRT  
 <213> Homo sapiens

<400> 38  
 Met Leu Leu Leu Leu Leu Leu Pro Pro Leu Leu Cys Gly Arg Val  
 1 5 10 15

Gly Ala Lys Glu Gln Lys Asp Tyr Leu Leu Thr Met Gln Lys Ser Val  
 20 25 30

Thr Val Gln Glu Gly Leu Cys Val Ser Val Leu Cys Ser Phe Ser Tyr  
 35 40 45

Pro Gln Asn Gly Trp Thr Ala Ser Asp Pro Val His Gly Tyr Trp Phe  
 50 55 60

Arg Ala Gly Asp His Val Ser Arg Asn Ile Pro Val Ala Thr Asn Asn  
 65 70 75 80

Pro Ala Arg Ala Val Gln Glu Glu Thr Arg Asp Arg Phe His Leu Leu  
 85 90 95

Gly Asp Pro Gln Asn Lys Asp Cys Thr Leu Ser Ile Arg Asp Thr Arg  
 100 105 110

Glu Ser Asp Ala Gly Thr Tyr Val Phe Cys Val Glu Arg Gly Asn Met  
 115 120 125

Lys Trp Asn Tyr Lys Tyr Asp Gln Leu Ser Val Asn Val Thr Ala Ser  
 130 135 140

Gln Asp Leu Leu Ser Arg Tyr Arg Leu Glu Val Pro Glu Ser Val Thr  
 145 150 155 160

Val Gln Glu Gly Leu Cys Val Ser Val Pro Cys Ser Val Leu Tyr Pro  
 165 170 175

His Tyr Asn Trp Thr Ala Ser Ser Pro Val Tyr Gly Ser Trp Phe Lys  
 180 185 190

Glu Gly Ala Asp Ile Pro Trp Asp Ile Pro Val Ala Thr Asn Thr Pro  
 195 200 205

Ser Gly Lys Val Gln Glu Asp Thr His Gly Arg Phe Leu Leu Leu Gly  
 210 215 220

Asp Pro Gln Thr Asn Asn Cys Ser Leu Ser Ile Arg Asp Ala Arg Lys  
 225 230 235 240

Gly Asp Ser Gly Lys Tyr Tyr Phe Gln Val Glu Arg Gly Ser Arg Lys  
 245 250 255

05/06/2004

Trp Asn Tyr Ile Tyr Asp Lys Leu Ser Val His Val Thr Ala Leu Thr  
 260 265 270  
 His Met Pro Thr Phe Ser Ile Pro Gly Thr Leu Glu Ser Gly His Pro  
 275 280 285  
 Arg Asn Leu Thr Cys Ser Val Pro Trp Ala Cys Glu Gln Gly Thr Pro  
 290 295 300  
 Pro Thr Ile Thr Trp Met Gly Ala Ser Val Ser Ser Leu Asp Pro Thr  
 305 310 315 320  
 Ile Thr Arg Ser Ser Met Leu Ser Leu Ile Pro Gln Pro Gln Asp His  
 325 330 335  
 Gly Thr Ser Leu Thr Cys Gln Val Thr Leu Pro Gly Ala Gly Val Thr  
 340 345 350  
 Met Thr Arg Ala Val Arg Leu Asn Ile Ser Tyr Pro Pro Gln Asn Leu  
 355 360 365  
 Thr Met Thr Val Phe Gln Gly Asp Gly Thr Ala Ser Thr Thr Leu Arg  
 370 375 380  
 Asn Gly Ser Ala Leu Ser Val Leu Glu Gly Gln Ser Leu His Leu Val  
 385 390 395 400  
 Cys Ala Val Asp Ser Asn Pro Pro Ala Arg Leu Ser Trp Thr Trp Gly  
 405 410 415  
 Ser Leu Thr Leu Ser Pro Ser Gln Ser Ser Asn Leu Gly Val Leu Glu  
 420 425 430  
 Leu Pro Arg Val His Val Lys Asp Glu Gly Glu Phe Thr Cys Arg Ala  
 435 440 445  
 Gln Asn Pro Leu Gly Ser Gln His Ile Ser Leu Ser Leu Ser Leu Gln  
 450 455 460  
 Asn Glu Tyr Thr Gly Lys Met Arg Pro Ile Ser Gly Val Thr Leu Gly  
 465 470 475 480  
 Ala Phe Gly Gly Ala Gly Ala Thr Ala Leu Val Phe Leu Tyr Phe Cys  
 485 490 495  
 Ile Ile Phe Val Val Val Arg Ser Cys Arg Lys Lys Ser Ala Arg Pro  
 500 505 510  
 Ala Val Ala Trp Gly Ile Gln Ala Trp Arg Thr Gln Thr Leu Ser Gly  
 515 520 525  
 Ala Gln Pro Leu Arg Asp Pro  
 530 535

&lt;210&gt; 39

&lt;211&gt; 274

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400>	39		
Met Ser Ser Asn Gly Ile Pro Glu Cys Tyr Ala Glu Glu Asp Glu Phe			
1	5	10	15
Ser Gly Leu Glu Thr Asp Thr Ala Val Pro Thr Glu Glu Ala Tyr Val			
20	25	30	
Ile Tyr Asp Glu Asp Tyr Glu Phe Glu Thr Ser Arg Pro Pro Thr Thr			
35	40	45	
Thr Glu Pro Ser Thr Thr Ala Thr Thr Pro Arg Val Ile Pro Glu Glu			
50	55	60	
Gly Ala Ile Ser Ser Phe Pro Glu Glu Glu Phe Asp Leu Ala Gly Arg			
65	70	75	80
Lys Arg Phe Val Ala Pro Tyr Val Thr Tyr Leu Asn Lys Asp Pro Ser			
85	90	95	
Ala Pro Cys Ser Leu Thr Asp Ala Leu Asp His Phe Gln Val Asp Ser			
100	105	110	
Leu Asp Glu Ile Ile Pro Asn Asp Leu Lys Lys Ser Asp Leu Pro Pro			
115	120	125	
Gln His Ala Pro Arg Asn Ile Thr Val Val Ala Val Glu Gly Cys His			
130	135	140	
Ser Phe Val Ile Val Asp Trp Asp Lys Ala Thr Pro Gly Asp Val Val			
145	150	155	160
Thr Gly Tyr Leu Val Tyr Ser Ala Ser Tyr Glu Asp Phe Ile Arg Asn			
165	170	175	
Lys Trp Ser Thr Gln Ala Ser Ser Val Thr His Leu Pro Ile Glu Asn			
180	185	190	
Leu Lys Pro Asn Thr Arg Tyr Tyr Phe Lys Val Gln Ala Gln Asn Pro			
195	200	205	
His Gly Tyr Gly Pro Ile Ser Pro Ser Val Ser Phe Val Thr Glu Ser			
210	215	220	
Asp Asn Pro Leu Leu Val Val Arg Pro Pro Gly Gly Glu Pro Ile Trp			
225	230	235	240
Ile Pro Phe Ala Phe Lys His Asp Pro Ser Tyr Thr Asp Cys His Gly			
245	250	255	
Arg Gln Tyr Val Lys Arg Thr Leu Val Ser Lys Val Arg Gly Ser Trp			
260	265	270	
Ser Leu			

<210> 40  
<211> 468  
<212> PRT  
<213> Homo sapiens

<400> 40  
Met Pro Ala Leu His Thr Leu Asn Leu Asp His Asn Leu Ile Asp Ala  
1 5 10 15  
Leu Pro Pro Gly Ala Phe Ala Gln Leu Gly Gln Leu Ser Arg Leu Asp  
20 25 30  
Leu Thr Ser Asn Arg Leu Ala Thr Leu Ala Pro Asp Pro Leu Phe Ser  
35 40 45  
Arg Gly Arg Asp Ala Glu Ala Ser Pro Ala Pro Leu Val Leu Ser Phe  
50 55 60  
Ser Gly Asn Pro Leu His Cys Asn Cys Glu Leu Leu Trp Leu Arg Arg  
65 70 75 80  
Leu Ala Arg Pro Asp Asp Leu Glu Thr Cys Ala Ser Pro Pro Gly Leu  
85 90 95  
Ala Gly Arg Tyr Phe Trp Ala Val Pro Glu Gly Glu Phe Ser Cys Glu  
100 105 110  
Pro Pro Leu Ile Ala Arg His Thr Gln Arg Leu Trp Val Leu Glu Gly  
115 120 125  
Gln Arg Ala Thr Leu Arg Cys Arg Ala Leu Gly Asp Pro Ala Pro Thr  
130 135 140  
Met His Trp Val Gly Pro Asp Asp Arg Leu Val Gly Asn Ser Ser Arg  
145 150 155 160  
Ala Arg Ala Phe Pro Asn Gly Thr Leu Glu Ile Gly Ala Thr Gly Ala  
165 170 175  
Gly Asp Ala Gly Gly Tyr Thr Cys Ile Ala Thr Asn Pro Ala Gly Glu  
180 185 190  
Ala Thr Ala Arg Val Glu Leu Arg Val Leu Ala Leu Pro His Gly Gly  
195 200 205  
Asn Ser Ser Ala Glu Gly Gly Arg Pro Gly Pro Ser Asp Ile Ala Ala  
210 215 220  
Ser Ala Arg Thr Ala Ala Glu Gly Glu Thr Leu Glu Ser Glu Pro  
225 230 235 240  
Ala Val Gln Val Thr Glu Val Thr Ala Thr Ser Gly Leu Val Ser Trp  
245 250 255  
Gly Pro Gly Arg Pro Ala Asp Pro Val Trp Met Phe Gln Ile Gln Tyr  
260 265 270

Asn Ser Ser Glu Asp Glu Thr Leu Ile Tyr Arg Ile Val Pro Ala Ser  
 275 280 285  
  
 Ser His His Phe Leu Leu Lys His Leu Val Pro Gly Ala Asp Tyr Asp  
 290 295 300  
  
 Leu Cys Leu Leu Ala Leu Ser Pro Ala Ala Gly Pro Ser Asp Leu Thr  
 305 310 315 320  
  
 Ala Thr Arg Leu Leu Gly Cys Ala His Phe Ser Thr Leu Pro Ala Ser  
 325 330 335  
  
 Pro Leu Cys His Ala Leu Gln Ala His Val Leu Gly Gly Thr Leu Thr  
 340 345 350  
  
 Val Ala Val Gly Gly Val Leu Val Ala Ala Leu Leu Val Phe Thr Val  
 355 360 365  
  
 Ala Leu Leu Val Arg Gly Arg Gly Ala Gly Asn Gly Arg Leu Pro Leu  
 370 375 380  
  
 Lys Leu Ser His Val Gln Ser Gln Thr Asn Gly Gly Pro Ser Pro Thr  
 385 390 395 400  
  
 Pro Lys Ala His Pro Pro Arg Ser Pro Pro Pro Arg Pro Gln Arg Ser  
 405 410 415  
  
 Cys Ser Leu Asp Leu Gly Asp Ala Gly Cys Tyr Gly Tyr Ala Arg Arg  
 420 425 430  
  
 Leu Gly Gly Ala Trp Ala Arg Arg Ser His Ser Val His Gly Gly Leu  
 435 440 445  
  
 Leu Gly Ala Gly Cys Arg Gly Val Gly Gly Ser Ala Glu Arg Leu Glu  
 450 455 460  
  
 Glu Ser Val Val  
 465  
  
 <210> 41  
 <211> 203  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 41  
 Met Ala Arg Pro Arg Pro Arg Glu Tyr Lys Ala Gly Asp Leu Val Phe  
 1 5 10 15  
  
 Ala Lys Met Lys Gly Tyr Pro His Trp Pro Ala Arg Ile Asp Glu Leu  
 20 25 30  
  
 Pro Glu Gly Ala Val Lys Pro Pro Ala Asn Lys Tyr Pro Ile Phe Phe  
 35 40 45  
  
 Phe Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro  
 50 55 60

Tyr Lys Glu Tyr Lys Asp Lys Phe Gly Lys Ser Asn Lys Arg Lys Gly  
 65                    70                    75                    80

Phe Asn Glu Gly Leu Trp Glu Ile Glu Asn Asn Pro Gly Val Lys Phe  
 85                    90                    95

Thr Gly Tyr Gln Ala Ile Gln Gln Ser Ser Ser Glu Thr Glu Gly  
 100                    105                    110

Glu Gly Asn Thr Ala Asp Ala Ser Ser Glu Glu Glu Gly Asp Arg  
 115                    120                    125

Val Glu Glu Asp Gly Lys Gly Lys Arg Lys Asn Glu Lys Ala Gly Ser  
 130                    135                    140

Lys Arg Lys Lys Ser Tyr Thr Ser Lys Lys Ser Ser Lys Gln Ser Arg  
 145                    150                    155                    160

Lys Ser Pro Gly Asp Glu Asp Asp Lys Asp Cys Lys Glu Glu Asn  
 165                    170                    175

Lys Ser Ser Ser Glu Gly Asp Ala Gly Asn Asp Thr Arg Asn Thr  
 180                    185                    190

Thr Ser Asp Leu Gln Lys Thr Ser Glu Gly Thr  
 195                    200

<210> 42  
<211> 253  
<212> PRT  
<213> Homo sapiens

<400> 42  
Met Arg Ser Gly Lys Met Ala Pro Lys Pro Gln Ser Arg Cys Thr Ser  
 1                    5                    10                    15

Thr Arg Ser Ala Gly Glu Ala Pro Ser Glu Asn Gln Ser Pro Ser Lys  
 20                    25                    30

Gly Pro Glu Glu Ala Ser Ser Glu Val Gln Asp Thr Asn Glu Val His  
 35                    40                    45

Val Pro Gly Asp Gln Asp Glu Pro Gln Thr Leu Gly Lys Lys Gly Ser  
 50                    55                    60

Lys Asn Asn Ile Ser Val Tyr Met Thr Leu Asn Gln Lys Lys Ser Asp  
 65                    70                    75                    80

Ser Ser Ser Ala Ser Val Cys Ser Ile Asp Ser Thr Asp Asp Leu Lys  
 85                    90                    95

Ser Ser Asn Ser Glu Cys Ser Ser Ser Glu Ser Phe Asp Phe Pro Pro  
 100                    105                    110

Gly Ser Met His Ala Pro Ser Thr Ser Ser Thr Ser Ser Ser Lys  
 115                    120                    125

Glu Glu Lys Lys Leu Ser Asn Ser Leu Lys Met Lys Val Phe Ser Lys  
 130 135 140

Asn Val Ser Lys Cys Val Thr Pro Asp Gly Arg Thr Ile Cys Val Gly  
 145 150 155 160

Asp Ile Val Trp Ala Lys Ile Tyr Gly Phe Pro Trp Trp Pro Ala Arg  
 165 170 175

Ile Leu Thr Ile Thr Val Ser Arg Lys Asp Asn Gly Leu Leu Val Arg  
 180 185 190

Gln Glu Ala Arg Ile Ser Trp Phe Gly Ser Pro Thr Thr Ser Phe Leu  
 195 200 205

Ala Leu Ser Gln Leu Ser Pro Phe Leu Glu Asn Phe Gln Ser Arg Phe  
 210 215 220

Asn Lys Lys Arg Lys Gly Leu Tyr Arg Lys Ala Ile Thr Glu Ala Ala  
 225 230 235 240

Lys Ala Ala Lys Gln Leu Thr Pro Glu Val Arg Ala Cys  
 245 250

<210> 43

<211> 314

<212> PRT

<213> Homo sapiens

<400> 43

Met Pro His Ala Phe Lys Pro Gly Asp Leu Val Phe Ala Lys Met Lys  
 1 5 10 15

Gly Tyr Pro His Trp Pro Ala Arg Ile Asp Asp Ile Ala Asp Gly Ala  
 20 25 30

Val Lys Pro Pro Pro Asn Lys Tyr Pro Ile Phe Phe Gly Thr His  
 35 40 45

Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro Tyr Asp Lys Cys  
 50 55 60

Lys Asp Lys Tyr Gly Lys Pro Asn Lys Arg Lys Gly Phe Asn Glu Gly  
 65 70 75 80

Leu Trp Glu Ile Gln Asn Asn Pro His Ala Ser Tyr Ser Ala Pro Pro  
 85 90 95

Pro Val Ser Ser Ser Asp Ser Glu Ala Pro Glu Ala Asn Pro Ala Asp  
 100 105 110

Gly Ser Asp Ala Asp Glu Asp Asp Glu Asp Arg Gly Val Met Ala Val  
 115 120 125

Thr Ala Val Thr Ala Thr Ala Ala Ser Asp Arg Met Glu Ser Asp Ser  
 130 135 140

Asp Ser Asp Lys Ser Ser Asp Asn Ser Gly Leu Lys Arg Lys Thr Pro  
 145 150 155 160  
 Ala Leu Lys Met Ser Val Ser Lys Arg Ala Arg Lys Ala Ser Ser Asp  
 165 170 175  
 Leu Asp Gln Ala Ser Val Ser Pro Ser Glu Glu Glu Asn Ser Glu Ser  
 180 185 190  
 Ser Ser Glu Ser Glu Lys Thr Ser Asp Gln Asp Phe Thr Pro Glu Lys  
 195 200 205  
 Lys Ala Ala Val Arg Ala Pro Arg Arg Gly Pro Leu Gly Gly Arg Lys  
 210 215 220  
 Lys Lys Lys Ala Pro Ser Ala Ser Asp Ser Lys Ala Asp Ser  
 225 230 235 240  
 Asp Gly Ala Lys Pro Glu Pro Val Ala Met Ala Arg Ser Ala Ser Ser  
 245 250 255  
 Ser Ser Ser Ser Ser Ser Asp Ser Asp Val Ser Val Lys Lys  
 260 265 270  
 Pro Pro Arg Gly Arg Lys Pro Thr Glu Lys Pro Leu Pro Lys Pro Arg  
 275 280 285  
 Gly Arg Lys Pro Lys Pro Glu Arg Pro Pro Ser Ser Ser Ser Asp  
 290 295 300  
 Ser Asp Ser Asp Glu Val Asp Arg Ile Thr  
 305 310

<210> 44  
 <211> 86  
 <212> PRT  
 <213> Homo sapiens

<400> 44  
 Met Asn Arg Gly Asp Phe Leu Leu Ser Val Asn Gly Ala Ser Leu Ala  
 1 5 10 15  
 Gly Leu Ala His Gly Asn Val Leu Lys Val Leu His Gln Ala Gln Leu  
 20 25 30  
 His Lys Asp Ala Leu Val Val Ile Lys Lys Gly Met Asp Gln Pro Arg  
 35 40 45  
 Pro Ser Ala Arg Gln Glu Pro Pro Thr Ala Asn Gly Lys Gly Leu Leu  
 50 55 60  
 Ser Arg Lys Thr Ile Pro Leu Glu Pro Gly Ile Gly Lys Met Ile Ile  
 65 70 75 80  
 Ser Thr Thr Ser Arg Leu  
 85

<210> 45  
<211> 167  
<212> PRT  
<213> Homo sapiens

<400> 45  
Met Ala Ala Ser Val Cys Ser Gly Leu Leu Gly Pro Arg Val Leu Ser  
1 5 10 15  
Trp Ser Arg Glu Leu Pro Cys Ala Trp Arg Ala Leu His Thr Ser Pro  
20 25 30  
Val Cys Ala Lys Asn Arg Ala Ala Arg Val Arg Val Ser Lys Gly Asp  
35 40 45  
Lys Pro Val Thr Tyr Glu Glu Ala His Ala Pro His Tyr Ile Ala His  
50 55 60  
Arg Lys Gly Trp Leu Ser Leu His Thr Gly Asn Leu Asp Gly Glu Asp  
65 70 75 80  
His Ala Ala Glu Arg Thr Val Glu Asp Val Phe Leu Arg Lys Phe Met  
85 90 95  
Trp Gly Thr Phe Pro Gly Cys Leu Ala Asp Gln Leu Val Leu Lys Arg  
100 105 110  
Arg Gly Asn Gln Leu Glu Ile Cys Ala Val Val Leu Arg Gln Leu Ser  
115 120 125  
Pro His Lys Tyr Tyr Phe Leu Val Gly Tyr Ser Glu Thr Leu Leu Ser  
130 135 140  
Tyr Phe Tyr Lys Cys Pro Val Arg Leu His Leu Gln Thr Val Pro Ser  
145 150 155 160  
Lys Val Val Tyr Lys Tyr Leu  
165

<210> 46  
<211> 281  
<212> PRT  
<213> Homo sapiens

<400> 46  
Met Gly Ser Arg Gly Gln Gly Leu Leu Leu Ala Tyr Cys Leu Leu  
1 5 10 15  
Ala Phe Ala Ser Gly Leu Val Leu Ser Arg Val Pro His Val Gln Gly  
20 25 30  
Glu Gln Gln Glu Trp Glu Gly Thr Glu Glu Leu Pro Ser Pro Pro Asp  
35 40 45  
His Ala Glu Arg Ala Glu Glu Gln His Glu Lys Tyr Arg Pro Ser Gln  
50 55 60

Asp Gln Gly Leu Pro Ala Ser Arg Cys Leu Arg Cys Cys Asp Pro Gly  
 65 70 75 80

Thr Ser Met Tyr Pro Ala Thr Ala Val Pro Gln Ile Asn Ile Thr Ile  
 85 90 95

Leu Lys Gly Glu Lys Gly Asp Arg Gly Asp Arg Gly Leu Gln Gly Lys  
 100 105 110

Tyr Gly Lys Thr Gly Ser Ala Gly Ala Arg Gly His Thr Gly Pro Lys  
 115 120 125

Gly Gln Lys Gly Ser Met Gly Ala Pro Gly Glu Arg Cys Lys Ser His  
 130 135 140

Tyr Ala Ala Phe Ser Val Gly Arg Lys Lys Pro Met His Ser Asn His  
 145 150 155 160

Tyr Tyr Gln Thr Val Ile Phe Asp Thr Glu Phe Val Asn Leu Tyr Asp  
 165 170 175

His Phe Asn Met Phe Thr Gly Lys Phe Tyr Cys Tyr Val Pro Gly Leu  
 180 185 190

Tyr Phe Phe Ser Leu Asn Val His Thr Trp Asn Gln Lys Glu Thr Tyr  
 195 200 205

Leu His Ile Met Lys Asn Glu Glu Val Ala Ile Leu Phe Ala Gln  
 210 215 220

Val Gly Asp Arg Ser Ile Met Gln Ser Gln Ser Leu Met Leu Glu Leu  
 225 230 235 240

Arg Glu Gln Asp Gln Val Trp Val Arg Leu Tyr Lys Gly Glu Arg Glu  
 245 250 255

Asn Ala Ile Phe Ser Glu Glu Leu Asp Thr Tyr Ile Thr Phe Ser Gly  
 260 265 270

Tyr Leu Val Lys His Ala Thr Glu Pro  
 275 280

<210> 47  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 47  
 Met Lys Gly Ser Arg Ala Leu Leu Leu Val Ala Leu Thr Leu Phe Cys  
 1 5 10 15

Ile Cys Arg Met Ala Thr Gly Glu Asp Asn Asp Glu Phe Phe Met Asp  
 20 25 30

Phe Leu Gln Thr Leu Leu Val Gly Thr Pro Glu Glu Leu Tyr Glu Gly  
 35 40 45

09082620242201

Thr Leu Gly Lys Tyr Asn Val Asn Glu Asp Ala Lys Ala Ala Met Thr  
 50 55 60

Glu Leu Lys Ser Cys Ile Asp Gly Leu Gln Pro Met His Lys Ala Glu  
 65 70 75 80

Leu Val Lys Leu Leu Val Gln Val Leu Gly Ser Gln Asp Gly Ala Gly  
 85 90 95

Thr Asp Tyr Lys Asp Asp Asp Asp Lys  
 100 105

<210> 48

<211> 595

<212> PRT

<213> Homo sapiens

<400> 48

Met Leu Leu Leu Leu Leu Leu Pro Pro Leu Leu Cys Gly Arg Val  
 1 5 10 15

Gly Ala Lys Glu Gln Lys Asp Tyr Leu Leu Thr Met Gln Lys Ser Val  
 20 25 30

Thr Val Gln Glu Gly Leu Cys Val Ser Val Leu Cys Ser Phe Ser Tyr  
 35 40 45

Pro Gln Asn Gly Trp Thr Ala Ser Asp Pro Val His Gly Tyr Trp Phe  
 50 55 60

Arg Ala Gly Asp His Val Ser Arg Asn Ile Pro Val Ala Thr Asn Asn  
 65 70 75 80

Pro Ala Arg Ala Val Gln Glu Glu Thr Arg Asp Arg Phe His Leu Leu  
 85 90 95

Gly Asp Pro Gln Asn Lys Asp Cys Thr Leu Ser Ile Arg Asp Thr Arg  
 100 105 110

Glu Ser Asp Ala Gly Thr Tyr Val Phe Cys Val Glu Arg Gly Asn Met  
 115 120 125

Lys Trp Asn Tyr Lys Tyr Asp Gln Leu Ser Val Asn Val Thr Ala Ser  
 130 135 140

Gln Asp Leu Leu Ser Arg Tyr Arg Leu Glu Val Pro Glu Ser Val Thr  
 145 150 155 160

Val Gln Glu Gly Leu Cys Val Ser Val Pro Cys Ser Val Leu Tyr Pro  
 165 170 175

His Tyr Asn Trp Thr Ala Ser Ser Pro Val Tyr Gly Ser Trp Phe Lys  
 180 185 190

Glu Gly Ala Asp Ile Pro Trp Asp Ile Pro Val Ala Thr Asn Thr Pro  
 195 200 205

Ser Gly Lys Val Gln Glu Asp Thr His Gly Arg Phe Leu Leu Leu Gly  
 210 215 220

Asp Pro Gln Thr Asn Asn Cys Ser Leu Ser Ile Arg Asp Ala Arg Lys  
 225 230 235 240

Gly Asp Ser Gly Lys Tyr Tyr Phe Gln Val Glu Arg Gly Ser Arg Lys  
 245 250 255

Trp Asn Tyr Ile Tyr Asp Lys Leu Ser Val His Val Thr Ala Leu Thr  
 260 265 270

His Met Pro Thr Phe Ser Ile Pro Gly Thr Leu Glu Ser Gly His Pro  
 275 280 285

Arg Asn Leu Thr Cys Ser Val Pro Trp Ala Cys Glu Gln Gly Thr Pro  
 290 295 300

Pro Thr Ile Thr Trp Met Gly Ala Ser Val Ser Ser Leu Asp Pro Thr  
 305 310 315 320

Ile Thr Arg Ser Ser Met Leu Ser Leu Ile Pro Gln Pro Gln Asp His  
 325 330 335

Gly Thr Ser Leu Thr Cys Gln Val Thr Leu Pro Gly Ala Gly Val Thr  
 340 345 350

Met Thr Arg Ala Val Arg Leu Asn Ile Ser Tyr Pro Pro Gln Asn Leu  
 355 360 365

Thr Met Thr Val Phe Gln Gly Asp Gly Thr Ala Ser Thr Thr Leu Arg  
 370 375 380

Asn Gly Ser Ala Leu Ser Val Leu Glu Gly Gln Ser Leu His Leu Val  
 385 390 395 400

Cys Ala Val Asp Ser Asn Pro Pro Ala Arg Leu Ser Trp Thr Trp Gly  
 405 410 415

Ser Leu Thr Leu Ser Pro Ser Gln Ser Ser Asn Leu Gly Val Leu Glu  
 420 425 430

Leu Pro Arg Val His Val Lys Asp Glu Gly Glu Phe Thr Cys Arg Ala  
 435 440 445

Gln Asn Pro Leu Gly Ser Gln His Ile Ser Leu Ser Leu Ser Leu Gln  
 450 455 460

Asn Glu Tyr Thr Gly Lys Met Arg Pro Ile Ser Gly Val Thr Leu Gly  
 465 470 475 480

Ala Phe Gly Gly Ala Gly Ala Thr Ala Leu Val Phe Leu Tyr Phe Cys  
 485 490 495

Ile Ile Phe Val Val Val Arg Ser Cys Arg Lys Lys Ser Ala Arg Pro  
 500 505 510

Ala Val Gly Val Gly Asp Thr Gly Met Glu Asp Ala Asn Ala Val Arg  
 515 520 525  
 Gly Ser Ala Ser Gln Gly Pro Leu Ile Glu Ser Pro Ala Asp Asp Ser  
 530 535 540  
 Pro Pro His His Ala Pro Pro Ala Leu Ala Thr Pro Ser Pro Glu Glu  
 545 550 555 560  
 Gly Glu Ile Gln Tyr Ala Ser Leu Ser Phe His Lys Ala Arg Pro Gln  
 565 570 575  
 Tyr Pro Gln Glu Gln Glu Ala Ile Gly Tyr Glu Tyr Ser Glu Ile Asn  
 580 585 590  
 Ile Pro Lys  
 595

<210> 49  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 49  
 Met Glu Lys Phe Pro Trp Gln Lys Leu Arg Val Arg Thr Gly Cys Gly  
 1 5 10 15  
 Gly Pro Gln Val Cys Gly Gly Tyr His Leu Cys Leu Ala Val Leu Met  
 20 25 30  
 Gly Ile Pro Ser Pro Arg Glu Gly Cys Arg Ser Trp Asp Val Ala Ala  
 35 40 45  
 Glu Val Trp Thr Gln Arg Pro Arg Ala Ala Val Leu Leu Thr Gly  
 50 55 60  
 Gly Gly Glu Arg Thr Pro Arg Thr Gln Pro Gly Thr Glu Glu Ala Thr  
 65 70 75 80  
 Gly Pro Gly Ala Cys Ala Gly Trp Ile Ala Gln Asp Thr Pro Asn Pro  
 85 90 95  
 Phe Ser Lys Ala Gly Ala Gly Gly Glu Gly Thr Arg Gln Ser  
 100 105 110  
 Ala Gly Arg Ala Gly Gly Glu Pro Gly Gly Glu Gly Pro Trp  
 115 120 125  
 Val Arg Val Ser Trp Pro Pro Leu Leu Gln Gly Arg Gln Gly Gly  
 130 135 140

<210> 50  
 <211> 196  
 <212> PRT  
 <213> Homo sapiens

<400> 50  
 Met Leu Ser Leu Glu Phe Leu Ser Trp Ser Val Ser Pro Phe Pro Ser  
 1 5 10 15

Pro Arg His Pro Ser Thr Pro His Arg Ser His Arg Ala Ser Pro His  
 20 25 30

Pro Asp Arg Pro Pro Lys Asn Lys Gly Glu Val Ile Arg Ala Ser Ala  
 35 40 45

Ala Ser Arg Gln Thr Gln Gln Cys Arg Val Gly Val Leu Gly Val Leu  
 50 55 60

Asp Asp Pro Gly Pro Glu Leu Glu Leu Gln Glu Ala Ala Val Val Val  
 65 70 75 80

Arg Arg Leu Arg His Glu Ala Gly Lys Gly Gln Gly His Gln Arg Leu  
 85 90 95

Gln Glu Val Leu Gly Lys Leu His Ile Leu Pro Val Val Gln Pro Arg  
 100 105 110

Val Leu Gly His Asp Ala Ile Ala Gly Val Glu Gly Pro Gln Val His  
 115 120 125

Val Gln Val Val Ala Phe Ala Val Leu His Ala Glu Lys Val Ala Leu  
 130 135 140

Asp Arg Leu Leu Pro Tyr Glu Ala Ala Leu Ile His His Arg Ala Gly  
 145 150 155 160

Leu Cys Pro Pro Gln Leu Leu Ala Val Ala His Val Leu Gln Val Asp  
 165 170 175

Ala Gln Val His Val Val Val Pro Trp Asp Asp Val Pro Val Ala Gly  
 180 185 190

Gly Pro Gln Gln  
 195

<210> 51  
<211> 160  
<212> PRT  
<213> Homo sapiens

<400> 51  
 Met Arg Glu Gly Trp His Trp Gln Glu Glu Ser Thr Arg Thr Arg Met  
 1 5 10 15

Gly Ser Asp Leu Gln Ile Tyr Gln Met Val Met Pro Thr Gly Ser Arg  
 20 25 30

Gly Tyr Ala Trp Gly His Pro Gly Ser Ser Gln Ser Trp Arg Glu Thr  
 35 40 45

Gly Met Ser Arg Arg Pro Ala Gly Pro Ser Thr Ala Pro Asp Pro Lys  
 50 55 60

Lys Val Phe Cys Pro Arg Phe Arg Glu Pro Cys Ala Leu Gly Gln Gly  
 65                    70                    75                    80  
 Gln Ser Phe Gly Asn Ser Ala Gly Ser Gly Ala Arg Leu Ala Arg Phe  
 85                    90                    95  
 Lys Ser Trp Leu Tyr Arg Phe Gly Ala Arg Trp Ala Trp Gly Gly Val  
 100                  105                  110  
 Ala Val Ser Leu Cys Leu Ser Cys Phe Gln Asp Ala Gly Pro Leu Ala  
 115                  120                  125  
 Ala Gly Val Ala Ser Ala Thr Arg Gly Arg Ala Gly Pro Ala Pro Gly  
 130                  135                  140  
 Gly Pro Leu Trp Leu Pro Gly Asp Ser Thr Pro Arg Ala Cys Val Pro  
 145                  150                  155                  160

<210> 52  
<211> 226  
<212> PRT  
<213> Homo sapiens

<400> 52  
Met Val Gln Gln Gly Leu Leu Lys Asn Gly Ala His Gln Cys Ala His  
 1                    5                    10                    15  
 Leu Ile Cys Ile Asn Glu Ala His Val Gly Gly His Arg Glu Leu  
 20                  25                  30  
 Asp Ile Pro Gln His Arg Arg Gly Pro Leu Lys Leu His Leu Gly His  
 35                  40                  45  
 Arg Glu Leu Glu Ser Gln Val His Tyr His Ile Gln Gly Glu Glu Gly  
 50                  55                  60  
 Leu Glu Ser Arg Val Gly Gly Cys Gly Gln Asp Leu His Glu Gly Leu  
 65                  70                  75                  80  
 Gln Pro Gln Gly Gly Val Val Cys Val Glu His Gly His Arg Cys Gly  
 85                  90                  95  
 Thr Gln Pro His Leu Glu His His Arg His Gly Leu Gly Lys Leu Ala  
 100                 105                 110  
 Gly His Leu Arg Asp Glu Pro Ala Gln Ser Arg Gly Val Gln Gln Val  
 115                 120                 125  
 Val Ile Arg Pro Gln Leu Pro Cys Asp Val Gln Val Glu Gly Thr Gly  
 130                 135                 140  
 Leu Leu Gln Gln Gln Glu Arg Arg Val Lys Gln Leu Leu Gly Glu Ala  
 145                 150                 155                 160

His Gly Gly His Gly Ala Leu Gly Thr His Met Pro Trp Gln His Lys  
                  165                         170                         175

Arg Gly Gly Ile Arg Gly Gln Asp Asp Gly Leu Ala Gln Gln Glu Glu  
                  180                         185                         190

Asn Ser Ile Asp Phe Gln Gly Asn Val Val Thr Gly Asp Ser Gly His  
                  195                         200                         205

Thr Asp His Gly Ile Ala Asp Leu Gly Leu Arg Thr His Gly Val Glu  
                  210                         215                         220

Ala Asn  
                  225

<210> 53  
 <211> 164  
 <212> PRT  
 <213> Homo sapiens

<400> 53  
 Pro Gly Arg Pro Thr Arg Pro Leu Lys Phe Val Ile Leu His Ala Glu  
     1              5                     10                     15

Asp Asp Thr Asp Glu Ala Leu Arg Val Gln Asn Leu Leu Gln Asp Asp  
     20             25                     30

Phe Gly Ile Lys Pro Gly Ile Ile Phe Ala Glu Met Pro Cys Gly Arg  
     35             40                     45

Gln His Leu Gln Asn Leu Asp Asp Ala Val Asn Gly Ser Ala Trp Thr  
     50             55                     60

Ile Leu Leu Leu Thr Glu Asn Phe Leu Arg Asp Thr Trp Cys Asn Phe  
     65             70                     75                     80

Gln Phe Tyr Thr Ser Leu Met Asn Ser Val Asn Arg Gln His Lys Tyr  
     85             90                     95

Asn Ser Val Ile Pro Met Arg Pro Leu Asn Asn Pro Leu Pro Arg Glu  
     100             105                     110

Arg Thr Pro Phe Ala Leu Gln Thr Ile Asn Ala Leu Glu Glu Glu Ser  
     115             120                     125

Arg Gly Phe Pro Thr Gln Val Glu Arg Ile Phe Gln Glu Ser Val Tyr  
     130             135                     140

Lys Thr Gln Gln Thr Ile Trp Lys Glu Thr Arg Asn Met Val Gln Arg  
     145             150                     155                     160

Gln Phe Ile Ala

<210> 54

<211> 314  
<212> PRT  
<213> Homo sapiens

<400> 54  
Arg Val Asp Pro Arg Val Arg Gly Arg Val Gly Phe Glu Ser Leu Lys  
1 5 10 15  
Ser Asp Phe Asn Lys Tyr Trp Val Pro Cys Val Trp Phe Thr Asn Leu  
20 25 30  
Ala Ala Gln Ala Arg Arg Asp Gly Arg Ile Arg Asp Asp Ile Ala Leu  
35 40 45  
Cys Leu Leu Leu Glu Glu Leu Asn Lys Tyr Arg Ala Lys Cys Ser Met  
50 55 60  
Leu Phe His Tyr Asp Trp Ile Ser Ile Pro Leu Val Tyr Thr Gln Val  
65 70 75 80  
Val Thr Ile Ala Val Tyr Ser Phe Phe Ala Leu Ser Leu Val Gly Arg  
85 90 95  
Gln Phe Val Glu Pro Glu Ala Gly Ala Ala Lys Pro Gln Lys Leu Leu  
100 105 110  
Lys Pro Gly Gln Glu Pro Ala Pro Ala Leu Gly Asp Pro Asp Met Tyr  
115 120 125  
Val Pro Leu Thr Thr Leu Leu Gln Phe Phe Tyr Ala Gly Trp Leu  
130 135 140  
Lys Val Ala Glu Gln Ile Ile Asn Pro Phe Gly Glu Asp Asp Asp Asp  
145 150 155 160  
Phe Glu Thr Asn Gln Leu Ile Asp Arg Asn Leu Gln Val Ser Leu Leu  
165 170 175  
Ser Val Asp Glu Met Tyr Gln Asn Leu Pro Pro Ala Glu Lys Asp Gln  
180 185 190  
Tyr Trp Asp Glu Asp Gln Pro Gln Pro Pro Tyr Thr Val Ala Thr Ala  
195 200 205  
Ala Glu Ser Leu Arg Pro Ser Phe Leu Gly Ser Thr Phe Asn Leu Arg  
210 215 220  
Met Ser Asp Asp Pro Glu Gln Ser Leu Gln Val Glu Ala Ser Pro Gly  
225 230 235 240  
Ser Gly Arg Pro Ala Pro Ala Ala Gln Thr Pro Leu Leu Gly Arg Phe  
245 250 255  
Leu Gly Val Gly Ala Pro Ser Pro Ala Ile Ser Leu Arg Asn Phe Gly  
260 265 270  
Arg Val Arg Gly Thr Pro Arg Pro Pro His Leu Leu Arg Phe Arg Ala  
275 280 285

Glu Glu Gly Gly Asp Pro Glu Ala Ala Ala Arg Ile Glu Glu Glu Ser  
 290 295 300

Ala Glu Ser Gly Asp Glu Ala Leu Glu Pro  
 305 310

<210> 55  
 <211> 196  
 <212> PRT  
 <213> Homo sapiens

<400> 55  
 Asn Thr Thr His Tyr Arg Glu Ser Trp Tyr Ala Cys Arg Tyr Arg Ser  
 1 5 10 15

Gly Ile Pro Gly Ser Thr His Ala Ser Ala Gly Ser Val Ala Asp Ser  
 20 25 30

Asp Ala Val Val Lys Leu Asp Asp Gly His Leu Asn Asn Ser Leu Ser  
 35 40 45

Ser Pro Val Gln Ala Asp Val Tyr Phe Pro Arg Leu Ile Val Pro Phe  
 50 55 60

Cys Gly His Ile Lys Gly Gly Met Arg Pro Gly Lys Lys Val Leu Val  
 65 70 75 80

Met Gly Ile Val Asp Leu Asn Pro Glu Ser Phe Ala Ile Ser Leu Thr  
 85 90 95

Cys Gly Asp Ser Glu Asp Pro Pro Ala Asp Val Ala Ile Glu Leu Lys  
 100 105 110

Ala Val Phe Thr Asp Arg Gln Leu Leu Arg Asn Ser Cys Ile Ser Gly  
 115 120 125

Glu Arg Gly Glu Glu Gln Ser Ala Ile Pro Tyr Phe Pro Phe Ile Pro  
 130 135 140

Asp Gln Pro Phe Arg Val Glu Ile Leu Cys Glu His Pro Arg Phe Arg  
 145 150 155 160

Val Phe Val Asp Gly His Gln Leu Phe Asp Phe Tyr His Arg Ile Gln  
 165 170 175

Thr Leu Ser Ala Ile Asp Thr Ile Lys Ile Asn Gly Asp Leu Gln Ile  
 180 185 190

Thr Lys Leu Gly  
 195

<210> 56  
 <211> 231  
 <212> PRT  
 <213> Homo sapiens

<400> 56  
 Leu Arg Ala Ala Leu Pro Ala Leu Leu Pro Leu Leu Gly Leu Ala  
 1 5 10 15  
 Ala Ala Ala Val Ala Asp Cys Pro Ser Ser Thr Trp Ile Gln Phe Gln  
 20 25 30  
 Asp Ser Cys Tyr Ile Phe Leu Gln Glu Ala Ile Lys Val Glu Ser Ile  
 35 40 45  
 Glu Asp Val Arg Asn Gln Cys Thr Asp His Gly Ala Asp Met Ile Ser  
 50 55 60  
 Ile His Asn Glu Glu Asn Ala Phe Ile Leu Asp Thr Leu Lys Lys  
 65 70 75 80  
 Gln Trp Lys Gly Pro Asp Asp Ile Leu Leu Gly Met Phe Tyr Asp Thr  
 85 90 95  
 Asp Asp Ala Ser Phe Lys Trp Phe Asp Asn Ser Asn Met Thr Phe Asp  
 100 105 110  
 Lys Trp Thr Asp Gln Asp Asp Glu Asp Leu Val Asp Thr Cys Ala  
 115 120 125  
 Phe Leu His Ile Lys Thr Gly Glu Trp Lys Lys Gly Asn Cys Glu Val  
 130 135 140  
 Ser Ser Val Glu Gly Thr Leu Cys Lys Thr Ala Ile Pro Tyr Lys Arg  
 145 150 155 160  
 Lys Tyr Leu Ser Asp Asn His Ile Leu Ile Ser Ala Leu Val Ile Ala  
 165 170 175  
 Ser Thr Val Ile Leu Thr Val Leu Gly Ala Ile Ile Trp Phe Leu Tyr  
 180 185 190  
 Lys Lys His Ser Asp Ser Arg Phe Thr Thr Val Phe Ser Thr Ala Pro  
 195 200 205  
 Gln Ser Pro Tyr Asn Glu Asp Cys Val Leu Val Val Gly Glu Glu Asn  
 210 215 220  
 Glu Tyr Pro Val Gln Phe Asp  
 225 230

<210> 57  
<211> 367  
<212> PRT  
<213> Homo sapiens

<400> 57  
 Met Ser Ser Asn Gly Ile Pro Glu Cys Tyr Ala Glu Glu Asp Glu Phe  
 1 5 10 15  
 Ser Gly Leu Glu Thr Asp Thr Ala Val Pro Thr Glu Glu Ala Tyr Val

20	25	30	
Ile Tyr Asp Glu Asp Tyr Glu Phe Glu Thr Ser Arg Pro Pro Thr Thr			
35	40	45	
Thr Glu Pro Ser Thr Thr Ala Thr Thr Pro Arg Val Ile Pro Glu Glu			
50	55	60	
Gly Ala Ile Ser Ser Phe Pro Glu Glu Glu Phe Asp Leu Ala Gly Arg			
65	70	75	80
Lys Arg Phe Val Ala Pro Tyr Val Thr Tyr Leu Asn Lys Asp Pro Ser			
85	90	95	
Ala Pro Cys Ser Leu Thr Asp Ala Leu Asp His Phe Gln Val Asp Ser			
100	105	110	
Leu Asp Glu Ile Ile Pro Asn Asp Leu Lys Lys Ser Asp Leu Pro Pro			
115	120	125	
Gln His Ala Pro Arg Asn Ile Thr Val Val Ala Val Glu Gly Cys His			
130	135	140	
Ser Phe Val Ile Val Asp Trp Asp Lys Ala Thr Pro Gly Asp Val Val			
145	150	155	160
Thr Gly Tyr Leu Val Tyr Ser Ala Ser Tyr Glu Asp Phe Ile Arg Asn			
165	170	175	
Lys Trp Ser Thr Gln Ala Ser Ser Val Thr His Leu Pro Ile Glu Asn			
180	185	190	
Leu Lys Pro Asn Thr Arg Tyr Tyr Phe Lys Val Gln Ala Gln Asn Pro			
195	200	205	
His Gly Tyr Gly Pro Ile Ser Pro Ser Val Ser Phe Val Thr Glu Ser			
210	215	220	
Asp Asn Pro Leu Leu Val Val Arg Pro Pro Gly Gly Glu Pro Ile Trp			
225	230	235	240
Ile Pro Phe Ala Phe Lys His Asp Pro Ser Tyr Thr Asp Cys His Gly			
245	250	255	
Arg Gln Tyr Val Lys Arg Thr Trp Tyr Arg Lys Phe Val Gly Val Val			
260	265	270	
Leu Cys Asn Ser Leu Arg Tyr Lys Ile Tyr Leu Ser Asp Asn Leu Lys			
275	280	285	
Asp Thr Phe Tyr Ser Ile Gly Asp Ser Trp Gly Arg Gly Glu Asp His			
290	295	300	
Cys Gln Phe Val Asp Ser His Leu Asp Gly Arg Thr Gly Pro Gln Ser			
305	310	315	320
Tyr Val Glu Ala Leu Pro Thr Ile Gln Gly Tyr Tyr Arg Gln Tyr Arg			
325	330	335	

Gln Glu Pro Val Arg Phe Gly Asn Ile Gly Phe Gly Thr Pro Tyr Tyr  
 340 345 350

Tyr Val Gly Trp Tyr Glu Cys Gly Val Ser Ile Pro Gly Lys Trp  
 355 360 365

<210> 58  
 <211> 565  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (270)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 58  
 Met Thr Gly Leu Val Asp Leu Thr Leu Ser Arg Asn Ala Ile Thr Arg  
 1 5 10 15

Ile Gly Ala Arg Ala Phe Gly Asp Leu Glu Ser Leu Arg Ser Leu His  
 20 25 30

Leu Asp Gly Asn Arg Leu Val Glu Leu Gly Thr Gly Ser Leu Arg Gly  
 35 40 45

Pro Val Asn Leu Gln His Leu Ile Leu Ser Gly Asn Gln Leu Gly Arg  
 50 55 60

Ile Ala Pro Gly Ala Phe Asp Asp Phe Leu Glu Ser Leu Glu Asp Leu  
 65 70 75 80

Asp Leu Ser Tyr Asn Asn Leu Arg Gln Val Pro Trp Ala Gly Ile Gly  
 85 90 95

Ala Met Pro Ala Leu His Thr Leu Asn Leu Asp His Asn Leu Ile Asp  
 100 105 110

Ala Leu Pro Pro Gly Ala Phe Ala Gln Leu Gly Gln Leu Ser Arg Leu  
 115 120 125

Asp Leu Thr Ser Asn Arg Leu Ala Thr Leu Ala Pro Asp Pro Leu Phe  
 130 135 140

Ser Arg Gly Arg Asp Ala Glu Ala Ser Pro Ala Pro Leu Val Leu Ser  
 145 150 155 160

Phe Ser Gly Asn Pro Leu His Cys Asn Cys Glu Leu Leu Trp Leu Arg  
 165 170 175

Arg Leu Ala Arg Pro Asp Asp Leu Glu Thr Cys Ala Ser Pro Pro Gly  
 180 185 190

Leu Ala Gly Arg Tyr Phe Trp Ala Val Pro Glu Gly Glu Phe Ser Cys  
 195 200 205

Glu Pro Pro Leu Ile Ala Arg His Thr Gln Arg Leu Trp Val Leu Glu  
 210 215 220

Gly Gln Arg Ala Thr Leu Arg Cys Arg Ala Leu Gly Asp Pro Ala Pro  
 225 230 235 240

Thr Met His Trp Val Gly Pro Asp Asp Arg Leu Val Gly Asn Ser Ser  
 245 250 255

Arg Ala Arg Ala Phe Pro Asn Gly Thr Leu Glu Ile Gly Xaa Thr Gly  
 260 265 270

Ala Gly Asp Ala Gly Gly Tyr Thr Cys Ile Ala Thr Asn Pro Ala Gly  
 275 280 285

Glu Ala Thr Ala Arg Val Glu Leu Arg Val Leu Ala Leu Pro His Gly  
 290 295 300

Gly Asn Ser Ser Ala Glu Gly Gly Arg Pro Gly Pro Ser Asp Ile Ala  
 305 310 315 320

Ala Ser Ala Arg Thr Ala Ala Glu Gly Glu Gly Thr Leu Glu Ser Glu  
 325 330 335

Pro Ala Val Gln Val Thr Glu Val Thr Ala Thr Ser Gly Leu Val Ser  
 340 345 350

Trp Gly Pro Gly Arg Pro Ala Asp Pro Val Trp Met Phe Gln Ile Gln  
 355 360 365

Tyr Asn Ser Ser Glu Asp Glu Thr Leu Ile Tyr Arg Ile Val Pro Ala  
 370 375 380

Ser Ser His His Phe Leu Leu Lys His Leu Val Pro Gly Ala Asp Tyr  
 385 390 395 400

Asp Leu Cys Leu Leu Ala Leu Ser Pro Ala Ala Gly Pro Ser Asp Leu  
 405 410 415

Thr Ala Thr Arg Leu Leu Gly Cys Ala His Phe Ser Thr Leu Pro Ala  
 420 425 430

Ser Pro Leu Cys His Ala Leu Gln Ala His Val Leu Gly Gly Thr Leu  
 435 440 445

Thr Val Ala Val Gly Gly Val Leu Val Ala Ala Leu Leu Val Phe Thr  
 450 455 460

Val Ala Leu Leu Val Arg Gly Arg Gly Ala Gly Asn Gly Arg Leu Pro  
 465 470 475 480

Leu Lys Leu Ser His Val Gln Ser Gln Thr Asn Gly Gly Pro Ser Pro  
 485 490 495

Thr Pro Lys Ala His Pro Pro Arg Ser Pro Pro Pro Arg Pro Gln Arg  
 500 505 510

Ser Cys Ser Leu Asp Leu Gly Asp Ala Gly Cys Tyr Gly Tyr Ala Arg

515

520

525

Arg Leu Gly Gly Ala Trp Ala Arg Arg Ser His Ser Val His Gly Gly  
 530 535 540

Leu Leu Gly Ala Gly Cys Arg Gly Val Gly Gly Ser Ala Glu Arg Leu  
 545 550 555 560

Glu Glu Ser Val Val  
 565

&lt;210&gt; 59

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 59

Met Glu Lys Ala Lys Glu Arg Met Lys Lys Gln Ala Gln Asn Gly Lys  
 1 5 10 15

Ser His Ile Leu Gln Arg Asn Pro Leu Asn Ser Pro Gly Asn Leu Gln  
 20 25 30

Glu Met Lys Met Thr Lys Thr Ala Lys Lys Arg Lys Thr Lys Ala Ala  
 35 40 45

Leu Arg Val Glu Met Arg Ala Thr Thr Gln Glu Thr Gln Leu Gln Thr  
 50 55 60

Cys Arg Lys Pro Val Lys Gly Pro Asn Tyr His Asn Glu Cys Cys Ile  
 65 70 75 80

Leu Arg Glu Thr Thr Arg Arg Leu Tyr Val Trp Leu Ser Asn Ile Leu  
 85 90 95

Gly Phe Asp Met Asn Gln His Ile Val Leu Val Val Ile Asp Arg Thr  
 100 105 110

Pro Val Cys Met Tyr Ile Ile His Ile Pro Leu Cys Cys Val Ser Gly  
 115 120 125

Gly Lys Asp Ile Leu Ala Phe Phe Lys Ser Tyr  
 130 135

&lt;210&gt; 60

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 60

Met Ala Arg Pro Arg Pro Arg Glu Tyr Lys Ala Gly Asp Leu Val Phe  
 1 5 10 15

Ala Lys Met Lys Gly Tyr Pro His Trp Pro Ala Arg Ile Asp Glu Leu  
 20 25 30

 DINGZIANG  
· 0122504

Pro Glu Gly Ala Val Lys Pro Pro Ala Asn Lys Tyr Pro Ile Phe Phe  
 35 40 45

Phe Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro  
 50 55 60

Tyr Lys Glu Tyr Lys Asp Lys Phe Gly Lys Ser Asn Lys Arg Lys Gly  
 65 70 75 80

Phe Asn Glu Gly Leu Trp Glu Ile Glu Asn Asn Pro Gly Val Lys Phe  
 85 90 95

Thr Gly Tyr Gln Ala Ile Gln Gln Ser Ser Ser Glu Thr Glu Gly  
 100 105 110

Glu Gly Asn Thr Ala Asp Ala Ser Ser Glu Glu Glu Gly Asp Arg  
 115 120 125

Val Glu Glu Asp Gly Lys Lys Lys Lys Lys Asn Leu Val Pro  
 130 135 140

Asn  
 145

<210> 61  
<211> 104  
<212> PRT  
<213> Homo sapiens

<400> 61  
Met Met Gln Leu Asn Phe Ile Arg Thr Arg Leu Val Gly Thr Gly Val  
 1 5 10 15

Ala Thr Ser Arg Ala Arg Arg Gly Thr Gly Glu Gly Ser Gln Gly Cys  
 20 25 30

His Pro Val Leu Leu Val Ile Val Val Leu Val Ile Gly Thr Gly Thr  
 35 40 45

Val Leu Thr Ala Gln His Leu His Gln Gln Leu Asp Gln Leu Arg Leu  
 50 55 60

Val His Trp Leu Gln Ala Ile Tyr Ala Gly Leu Glu Phe Ser His Cys  
 65 70 75 80

Cys Leu Gly Ile Phe Val Asp Ile Val Leu Ala Gln Gly Pro Leu Ile  
 85 90 95

Glu Leu Leu Trp Gly Pro His Gln  
 100

DRAFT RELEASE UNDER E.O. 14176